Modifications to Fuel Regulations to Provide Flexibility for E15; Modifications to RFS RIN Market Regulations: Response to Comments



Modifications to Fuel Regulations to Provide Flexibility for E15; Modifications to RFS RIN Market Regulations: Response to Comments

Assessment and Standards Division Office of Transportation and Air Quality U.S. Environmental Protection Agency



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List of Acronyms and Abbreviations

Numerous acronyms and abbreviations are included in this document. While this may not be an exhaustive list, to ease the reading of this document and for reference purposes, the following acronyms and abbreviations are defined here:

BOB Gasoline Blendstock for Oxygenate Blending

CAA Clean Air Act

CARB California Air Resources Board
CBI Confidential Business Information

CBOB Conventional Gasoline Blendstock for Oxygenate Blending

CDX Central Data Exchange
CEA Commodity Exchange Act
CFR Code of Federal Regulations

CFTC U.S. Commodity Futures Trading Commission

CO Carbon Monoxide

CRC Coordinating Research Council
CWC Cellulosic Waiver Credit

EISA Energy Independence and Security Act of 2007

EMTS EPA Moderated Transaction System
EPA U.S. Environmental Protection Agency

FFV Flex-Fuel Vehicle GHG Greenhouse Gas HC Hydrocarbon

LCFS Low Carbon Fuel Standard
MMR Misfueling Mitigation Rule
MOU Memorandum of Understanding

MY Model Year

NGL Natural Gas Liquid

NMOG Non-Methane Organic Gases

NO_x Nitrogen Oxides

NPRM Notice of Proposed Rulemaking

OP Obligated Party
PM Particulate Matter

PTD Product Transfer Document

RBOB Reformulated Gasoline Blendstock for Oxygenate Blending

REGS Renewables Enhancement and Growth Support Rule

RFG Reformulated Gasoline RFS Renewable Fuel Standard

RIN Renewable Identification Number RVO Renewable Volume Obligation

RVP Reid Vapor Pressure
SIP State Implementation Plan
SRE Small Refinery Exemption
USDA U.S. Department of Agriculture
VOC Volatile Organic Compounds

List of Organizations Submitting Comments

Docket	
Item	
Numbera	Commenter or Organization Name
0073	Michael Sayre, Government Affairs Manager, American Motorcyclist Association (AMA)
0171	Bryan Spiegel, President, Azzy's Design Works LTD
0225	T. Kiefer
0308	Brian Carron, Executive Marketing Representative, HollyFrontier Corporation
0309	Governor Pete Ricketts, Office of the Governor, State of Nebraska
0310	Paul Fox, Owner, Paul's Corvair
0436	L. M. Gibbs
0511	B. Campbell
0512	R. Erickson
0513	L. Waugh
0514	T. Loomis
0515	S. Jacobson
0516	B. Zeichner
0528	Geoff Cooper, President, CEO, Renewable Fuels Association (RFA)
0533	John Caupert, Executive Director, National Corn-to-Ethanol Research Center (NCERC)
0534	Nicole Vasilaros, SVP, Government and Legal Affairs, National Marine Manufacturers Association (NMMA)
0535	American Motorcyclist Association et al.
0536	American Motorcyclist Association et al.
0537	W. Zubrod
0539	Frank J. Macchiarola, Vice President, Downstream & Industry Operations, API Energy
0542	Adam C. Dunlop, Director -Regulatory and Technical Services, Midwest AgEnergy Group (MAG)
0543	Gary Anderson, Chief Executive Officer, Heartland Corn Products
0544	Delayne D. Johnson, Chief Executive Officer (CEO) Quad County Corn Processors
0545	Dale Moore, Executive Vice President, American Farm Bureau Federation
0546	Dan McGuire, Policy Director, American Corn Growers Foundation (ACGF)
0547	Mike Beam, Secretary of Agriculture, Kansas Department of Agriculture
0567	Richard Hanson, General Manager, Show Me Ethanol, LLC
0568	T. Green
0569	Matthew Jones, Chair, Tanks Subcommittee, Association of State and Territorial Solid Waste Management Officials (ASTSWMO)
0570	Tim Lust, Chief Executive Officer, National Sorghum Producers (NSP)
0571	Mick Henderson, General Manager, Commonwealth Agri-Energy, LLC

0572	Andrew W. Madden, Vice President, Strategy and Planning, Exxon Mobil
0573	Corporation Chris Wilson, Mid-Missouri Energy (MME)
	Carlos A. Garza, President and Chief Executive Officer (CEO), La Lomita, Inc.
0574	(L.L.I.)
0575	Timothy Winters, President and Chief Executive Officer (CEO), Western New York Energy, LLC
0576	Blake A. Banky, President, Newport Biodiesel Inc.
0577	Steven J. Rupp, President, Mcgyan Biodiesel, LLC
0578	Derek Peine, CEO, Western Plains Energy, LLC
0579	Daniel Heady, Iowa Farm Bureau Federation (IFBF)
0580	Dawn M. Carlson, CAE, President and CEO, FUELIowa
0581	Gary Wetish, President, Minnesota Farmers Union (MFU)
0582	CountryMark Cooperative (CountryMark)
0583	Curt Blades, Senior Vice President, Ag Services, Association of Equipment Manufacturers (AEM)
0584	Brian Kletscher, CEO, Highwater Ethanol, LLC
0595	Gerald Bachmeier, President, Red Trail Energy, LLC et al., North Dakota Ethanol
0585	Producers Association (NDEPA)
0586	HollyFrontier
0587	Randall Doyal, CEO, Al-Corn Clean Fuel
0588	William H. Somers, Grain Processing Corporation
0589	Tom Koehler, Pacific Ethanol Inc.
0611	Daniel J. Mustico, Vice President, Government & Market Affairs, Outdoor Power Equipment Institute (OPEI)
0641	Greg Schem, President, Channel Islands Harbor Lessees Association
0657	Jon Miller, President, and Tadd Nicholson, Executive Director, Ohio Corn & Wheat Growers Association (OCWGA)
0671	Scott Burnett, County Legislature, Jackson County, Missouri, Missouri Co-Chair, MARC Air Quality Forum et al., Mid-America Regional Council (MARC)
0699	B. W. Auten
0700	D. Haack
0701	J. H. Hensley
0702	L. Stubbe
0711	Randy Riley, Association of Equipment Manufacturers
0730	Randy E. Stookey, Senior Vice President and General Counsel, Renew Kansas Biofuels Association
0737	Salo L. Zelermeyer, Vice President for Federal Affairs and Counsel, Valero Energy Corporation
0748	Roger Johnson, President, National Farmers Union (NFU)
0749	Stephen Roe, CEO, Little Sioux Corn Processors, LLC (LSCP, LLC)
0750	John McKnight, Vice President, Environmental & Safety Compliance, Engine Manufacturers Division, National Marine Manufacturers Association

0753	Troy Wilson, Vice President Grain Processing, DuPont
0754	Jim Zook, Executive Director, Michigan Corn Growers Association (MCGA)
0756	Bruce W. Heine, Magellan Midstream Partners, L. P.
0757	The Boat Owners Association of The United States (Boat U.S.)
0758	Clifton L. Thomas, Jr., Chief Executive Officer, C. L. Thomas Inc. / Speedy Stop Food Stores, LLC
0759	Rita Hardy, Vice President, Quality and Compliance, Flint Hills Resources, L. P.
0762	Major L. Clark III, Acting Chief Counsel for Advocacy, and David Rostker, Assistant Chief Counsel, U.S. Small Business Administration's Office of Advocacy (Advocacy)
0763	Robert D. Boos, CEO, A. A. Boos & Sons, Inc
0764	Michael A. Hammel, Executive Vice President, General Counsel & Secretary, TransMontaigne Operating Company L P and TLP Management Services, LLC (TLP Entities or the Companies)
0765	Bill Burkett, Commissioner of Business Development, City of Toledo, OH
0766	Michael A. Hammel, SeaPort Sound Terminal, LLC (Seaport or the Company)
0767	Shaun Enright, Executive Secretary, Northwest Ohio Building & Construction Trades Council (NWOBTC)
0768	Nathan VanderGriend, President & CEO, ERI Solutions, LLC
0769	Dean Monske, President and CEO, Regional Growth Partnership
0770	David Fleetwood, Business Manager, LIUNA - Laborers Local 500
0771	Joshua M. Hughes, CEO and Legal Counsel, Associated General Contractors of Northwest Ohio (AGC of NW Ohio)
0773	Davie Stephens, President, American Soybean Association (ASA)
0774	John Kruse, World Agricultural Economic and Environmental Analysis (WAEES)
0775	Chris Peterson, President, HERO BX, and a member of the National Biodiesel Board
0776	Kent Engelbrecht, Chairman, National Biodiesel Board
0777	Roy Strom, President and CEO, W2Fuel, LLC
0778	David Cobb, Director of Federal Affairs, National Biodiesel Board
0779	Kurt Kovarik, Vice President of Federal Affairs, National Biodiesel Board
0780	Thom Petersen, Commissioner, Minnesota Department of Agriculture
0781	Jon Lowe, Engineering Manager, Pleasurecraft Marine Engine Group
0794	Erik Huschitt, President, Wisconsin Biofuels Association (WBFA)
0796	Frederick A. Walas, Product Quality, Fuels and Emerging Technologies Manager, Marathon Petroleum Company) (MPC)
0797	Mark Nelson, Director of Commodities, Kansas Farm Bureau (KFB)
0798	Jed R. Mandel, President, Engine Manufacturers Association (EMA)
0799	Frank J. Macchiarola, Vice President, Downstream and Industry Operations, American Petroleum Institute (API)
0800	David Bernstein, Executive Director, Environmental Markets Association (EMA)
0801	Gevo, Inc. (Gevo)
0802	Alex Menotti, Federal Affairs Manager, Neste

0803	Ryan Alexander, President, Taxpayers for Common Sense (TCS), and Pete Sepp, President, National Taxpayers Union (NTU)
0804	John Christianson, Managing Partner, Christianson PLLP
0805	Matthew Kevnick, Senior Manager, OBD, Defect Reporting and Regulatory Affairs, Volkswagen Group of America, Inc.
0806	Janice K. Raburn, Senior Director, Communications and External Affairs, BP America Inc.
0807	Hunter Carpenter, Director of Public Policy, Agricultural Retailers Association (ARA)
0808	Mike Lorenz, Executive Vice President of Petroleum Supply, Sheetz Inc.
0809	Richard Moskowitz, General Counsel, American Fuel & Petrochemical Manufacturers
0811	David Fisher, President, New York Farm Bureau (NYFB)
0813	Brittany M. Pemberton, Associate, Bracewell
0815	Ken Klippen, President, National Association of Egg Farmers
0817	Advanced Biofuels Association (ABFA)
0818	Theresa Sisung, Associate Field Crops & Advisory Team Specialist, Michigan Farm Bureau (MFB)
0819	Boat Owners Association of The United States (BoatU.S.)
0820	Angela Beranek Brandt et al., Larson-King, LLP on behalf of South Dakota Farmers Union et al.
0821	Mike Naig, Secretary of Agriculture, Iowa Department of Agriculture and Land Stewardship
0822	Angela Beranek Brandt et al., Larson King, LLP on behalf of Farmers Union Enterprises et al.
0823	Seth Harder, General Manager, Husker Ag LLC
0824	Mary Wiencke, Vice President, Transmission Regulation and Market Policy, PacifiCorp
0825	Angela Beranek Brandt et al., Larson King, LLP on behalf of Nebraska Farmers Union et al.
0826	Angela Beranek Brandt et al., Larson King, LLP on behalf of Urban Air Initiative et al.
0828	Angela Beranek Brandt et al., Larson King, LLP on behalf of Farmers Union Enterprises et al.
0830	Peter Welch et al., Member of Congress, Congress of the United States
0831	Angela Beranek Brandt et al., Larson King, LLP on behalf of Clean Fuels Development Coalition et al.
0832	Independent Fuel Terminal Operators Association (IFTOA)
0833	Mark Roberts, President, Kentucky Corn Growers Association (KyCGA)
0835	Jerome C. Muys, Jr., Muys & Associates LLC, on behalf of The Producers of Renewables United for Integrity Truth and Transparency
0836	Monroe Energy, LLC
0837	John B. McShane, Executive Vice President, General Counsel and Secretary, Philadelphia Energy Solutions Refining and Marketing LLC (PES)

0839	LeAnn Johnson Koch, Small Refiners Coalition
0841	Greg Schem, President, Channel Islands Harbor Lessees Association
0842	T. Donnelly
0843	Graven
0844	Karen (surname illegible)
0845	Mark S. Morgan, Regulatory Counsel, Petroleum Marketers Association of America (PMAA)
0846	B. Ponwith
0847	B. Pracht
0848	Mass Comment Campaign sponsored by Iowa Renewable Fuels Association
0849	Jeff R. Wasil, Engineering Manager, Emissions Compliance & Regulatory Development, Bombardier Recreational Products (BRP US, Inc.)
0850	Joe Harriman, Director, Environmental and Regulatory Strategy, Irving Oil Limited
0851	Maria Pica Karp, Vice President and General Manager, Corporate Affairs, Government Affairs, Chevron
0852	Brian Thalmann, President, Minnesota Corn Growers Association (MCGA) and Lynn Chrisp, President, National Corn Growers Association (NCGA)
0853	Dan Bowerson, Director, Vehicle Electrification and Fuels, Alliance of Automobile Manufacturers
0854	Troy Bredenkamp, Executive Director, Renewable Fuels Nebraska (RFN)
0855	Thomas R. Brooks, General Manager, Western Dubuque Biodiesel
0856	Senator Charles E. Grassley, United States Senate
0857	Richard DiGia, President and CEO, Aria Energy
0858	The Coalition of Fuel Marketers (CFM)
0859	HollyFrontier
0860	Susan G. Lafferty, Eversheds and David M. McCullough, Sutherland (US) LLP
0861	Grant R. Gulibon, Director, Regulatory Affairs, Pennsylvania Farm Bureau (PFB)
0862	Marine Retailers Association of the Americas (MRAA)
0863	Theresa Sisung, Associate Field Crops Advisory Team Specialist, Michigan Farm Bureau (MFB)
0864	Geoff Cooper, President and CEO, Renewable Fuels Association (RFA)
0865	Adam Monroe, President, Novozymes North America Inc.
0866	Tyson Slocum, Energy Program Director, Public Citizen, Inc.
0867	Murphy USA Inc.
0868	Kelly Stone, Senior Policy Analyst, ActionAid USA et al.
0869	Matthew Lucey, President, PBF Energy Inc. (PBF)
0870	Angela Beranek Brandt et al., Larson-King, LLP on behalf of Farmers Union Enterprises et al.
0871	Independent Fuel Terminal Operators Association (IFTOA)
0872	Greg Krissek, CEO, Kansas Corn Growers Association (KCGA)
0873	Douglas I. Greenhaus, Chief Regulatory Counsel, Environment Health and Safety, National Automobile Dealers Association (NADA)

0874	Dawn Caldwell, Head of Government Affairs, Aurora Cooperative Elevator Company
0875	J. Jared Snyder, Deputy Commissioner, Office of Climate, Air and Energy, New York State Department of Environmental Conservation
0876	Grant Kimberley, Iowa Biodiesel Board
0877	Brian Jennings, CEO, American Coalition for Ethanol (ACE)
0878	Evandro Gussi, CEO, and Alfred Szwarc, Emissions and Technology Expert, Brazilian Sugarcane Industry Association (UNICA)
0879	Stephanie Batchelor, Managing Director, Industrial and Environmental Biotechnology Innovation Organization (BIO)
0880	Mike Brown President, National Chicken Council (NCC)
0881	Delek US Holdings
0882	Doug Noem, President, and Lisa Richardson, Executive Director, South Dakota Corn Growers Association (SDCGA)
0883	Dawn M. Carlson, President and CEO, and Reo Menning, Executive Vice President, RIN Alliance
0884	Marla K. Benyshek Director, Fuels Regulatory Issues, Phillips 66 Company
0885	Kelly Stone, Senior Policy Analyst, ActionAid USA, et al.
0886	Elias Petersen, Senior Attorney, Kolmar Americas, Inc.
0887	Nicole Wagner, Executive Director, Wisconsin Corn Growers Association (WCGA)
0888	Kurt Kovarik, Vice President, Federal Affairs, National Biodiesel Board (NBB)
0889	Lynn Chrisp, President, National Corn Growers Association (NCGA)
0890	Jonathan Lewis, Senior Counsel and Sheila Karpf, Consultant, Clean Air Task Force et al.
0891	Devorah Ancel, Senior Attorney, Sierra Club et al.
0892	Institute for Energy Research
0893	Jed Smith, Chief Operating Officer, Rio Valley Biofuels, LLC
0894	C. Boyden Gray, et al., for Boyden Gray & Associates PLLC for Urban Air Initiative, Siouxland Ethanol, Little Sioux Corn Processors, Golden Grain Energy, and Absolute Energy
0895	Adam Gustafson, et al., Adam Gustafson, Boyden Gray & Associates PLLC for Illinois, Iowa, and Missouri Corn Growers Associations, and Nebraska Corn Board
0896	Sarah Delbecq, President, Indiana Corn Growers Association (ICGA)
0897	Jeff Hove, Vice President, Alternative Fuels Council (AFC)
0898	Scott Bouchie, Department Director Environmental Management & Sustainability, City of Mesa
0899	Matthew Lucey, President, PBF Energy Inc. (PBF)
0900	ACT Commodities (ACT)
0901	Aaron Allen, Site Manager, RMF Nooter, Inc.
0902	Daniel Ingber, Managing Director, Government & Legal Affairs, Specialty Equipment Market Association (SEMA)
0903	Murphy USA, Inc.

0904	Raymond E. Defenbaugh, Chairman, Illinois Renewable Fuels Association (RFA)
0905	Todd Campbell, Vice President, Public Policy and Regulatory Affairs, Clean
0903	Energy Fuels Corporation
0906	Lindsay C. Fitzgerald, Director, Government Affairs, Renewable Energy Group,
	Inc., (REG)
0907	Association of Marina Industries et al.
0908	Monte Shaw, Executive Director, Iowa Renewable Fuels Association
0909	Kevin Paap, President, Minnesota Farm Bureau Federation (MFBF)
0910	Timothy Rudnicki, Esq., Executive Director, Minnesota Bio-Fuels Association (MBA)
0911	John C. Meyer, Senior Researcher, Consumers' Research
	Douglas S. Kantor, Eva V. Rigamonti., Counsel to NACS and SIGMA and David
0912	H. Fialkov, Vice President, Government Relations, Legislative and Regulatory
	Counsel, NATSO
0913	Emily Skor, Chief Executive Officer, Growth Energy
0914	Sarah T. Caswell, Administrator, Nebraska Ethanol Board (NEB)
0915	David Cox, Director of Operations and General Counsel, Renewable Natural Gas (RNG)
0916	Suzanne Beaudette Murray, Small Retailers Coalition (SRC)
0917	A. Wardle
0918	Mark Watne, President, North Dakota Farmers Union (NDFU)
0919	Richard L. Guebert, Jr., President, Illinois Farm Bureau (IFB)
0920	Bart Ruth, Chair, 25x'25 Alliance (25x'25)
1012	Geoff Cooper, President and Chief Executive Officer, Renewable Fuels Association (RFA)
1103	A. Graven
1104	Delta Air Line, Inc. and Monroe Energy, LLC.
1105	Mass Comment Campaign sponsored by Renewable Fuel Association
1106	S. Ervin
1107	Collin C. Peterson, Member of Congress et al., Congressional Biofuels Caucus,
1107	Congress of the United States
1108	Alexander S. Holtan, Counsel, Eversheds Sutherland (US) LLP on behalf of Commercial Energy Working Group
a Individual as	amments from the public (and attachments submitted with comments) submitted to Docket No. EDA

^a Individual comments from the public (and attachments submitted with comments) submitted to Docket No. EPA-HQ-OAR-2018-0775 are assigned a unique 4-digit docket number that follows the base docket number (i.e., XXXX, where "XXXX" represents the unique 4-digit document docket number). For example, Docket Item No. EPA-HQ-OAR-2018-0775-0500 is presented as 0500 in this table and within the text of this document.

1. Extension of the 1-psi Waiver to E15

1.1 General E15 Comments

Commenters that provided comment on this topic include but are not limited to: 0073, 0534, 0544, 0545, 0546, 0547, 0568, 0570, 0573, 0579, 0580, 0581, 0582, 0583, 0584, 0585, 0587, 0611, 0657, 0671, 0730, 0737, 0748, 0753, 0754, 0757, 0768, 0780, 0794, 0798, 0799, 0801, 0803, 0804, 0805, 0806, 0807, 0808, 0809, 0820, 0821, 0830, 0841, 0845, 0848, 0851, 0852, 0854, 0856, 0858, 0859, 0863, 0864, 0865, 0869, 0872, 0873, 0874, 0875, 0877, 0878, 0879, 0880, 0882, 0884, 0887, 0888, 0889, 0890, 0892, 0893, 0896, 0903, 0904, 0907, 0908, 0913, 0914, 0918, 0919, 0920, 1107.

Comment:

Many commenters supported this rulemaking because it would help the ethanol industry increase the ethanol in fuel. They argued that this would in turn help American farmers. Much of this support came from the agricultural industry as well as the ethanol industry.

Response:

We believe that Congress' intent in 1990 to promote ethanol blending into gasoline by providing the original 1-psi waiver for E10 are equally applicable to E15 today. Therefore, in this action we are applying the 1-psi waiver to E15 in addition to E10 for the reasons discussed in the final rule.

Comment:

Other commenters were against providing E15 the 1-psi waiver. Some parties objected on legal grounds, whereas others provided input that providing the 1-psi waiver is inappropriate for E15.

Response:

We respond to comments about the legal justification for our action in Sections 1.2 and 1.3. We also respond to specific comments in Section 1.5.

1.2 Interpretation of CAA Section 211(h)(4)

1.2.1 Support Reinterpretation

Commenters that provided comment on this topic include but are not limited to: 0544, 0583, 0585, 0794, 0820, 0848, 0854, 0856, 0864, 0877, 0878, 0879, 0882, 0894, 0904, 0908, 0910, 0913, 0914, 0920.

Comment:

EPA received comments in support of our new interpretation of CAA sec. 211(h)(4) to permit E15 to receive the 1-psi waiver along with E10. Commenters suggested that this interpretation is consistent with Congressional intent and legislative history.

Response:

We appreciate comments in support of the interpretation of CAA sec. 211(h)(4) we are finalizing in this action. We are taking this action in light of the justification provided in Section II.B of the final rule and Section 1.2 of this document.

1.2.2 Against Reinterpretation

Commenters that provided comment on this topic include but are not limited to: 0796, 0799, 0805, 0809, 0851, 0858, 0892.

Comment:

Some commenters suggested that the 1-psi waiver is no longer needed at all, for E10 or E15, and that it should be eliminated. Some of these parties pointed to increased volatility as increasing VOCs and potentially ozone.

Other commenters suggested that EPA failed to consider the impacts on air quality of reinterpreting CAA sec. 211(h)(4) including on ozone formation and the impacts of cannister breakthrough at higher volatility.

Response:

As discussed in Section II.F of the final rule, the air quality effects of giving E15 the 1-psi waiver are expected to be minimal relative to E10 today. Since E15 at 10.0 psi RVP will displace E10 at 10.0 psi RVP and E15 will be held to the same RVP control as E10 currently, there would be no increase in evaporative emissions in use from such displacement. Also, E15 will be expected to have similar exhaust emissions as E10 as well. The negative impacts of higher gasoline volatility on vehicle emissions, and thus air quality, were well known at the time that EPA and then Congress provided E10 with the 1-psi RVP waiver. As the market for E10 has now grown to encompass all gasoline nationwide, this impact is being felt in all areas where the 1-psi waiver is allowed (which does not include RFG areas and some other areas with state fuel programs that do not allow the 1-psi waiver for E10). In this rulemaking we are reinterpreting CAA sec. 211(h)(4) as also extending the 1-psi RVP waiver to E15.

Comment:

Commenters suggested that EPA is reading the CAA sec. 211(f)(4) waiver as a blanket waiver from RVP regulations. They suggested that EPA can approve any blend of ethanol in gasoline through CAA sec. 211(f)(4) because that waiver results in a 1-psi waiver under CAA sec. 211(h)(4). They suggest this is the wrong interpretation because Congress could have plainly exempted all gasoline-ethanol blends from CAA sec. 211(h)(4), but it did not.

Response:

Although our reading of CAA sec. 211(h)(4) will now extend the 1-psi waiver to gasoline-ethanol blends that contain 9-15 volume percent ethanol, this is not a means to allow any fuel to receive the 1-psi waiver. As discussed further in Section II.B of the final rule, this action is only for gasoline-ethanol blends that contain at least 10 percent ethanol, and the introduction into commerce of fuels and fuel additives is also subject to the requirements of CAA sec. 211(f).

1.2.2.1 Consistency with Statutory Text, Statutory Scheme, Congressional Intent and Legislative History

Commenters that provided comment on this topic include but are not limited to: 0544, 0545, 0583, 0748, 0799, 0809, 0845, 0854, 0858, 0864, 0877, 0892, 0904, 0908, 0910, 0920.

Comment:

Commenters suggested that our interpretation of CAA sec. 211(h)(4) is not a permissible interpretation under the statute. Commenters stated that CAA sec. 211(h)(4) is not ambiguous and that the plain language of the statute only allows for fuel blends of 9-10 percent ethanol to receive the 1-psi waiver. Other commenters suggested that CAA sec. 211(h)(4) is either ambiguous or argued, in the alternative that if it is ambiguous that it cannot be read to mean "at least ten percent."

Commenters suggested that EPA's prior interpretations of CAA sec. 211(h)(4) indicate that EPA's new interpretation of the statute is an impermissible reading.

Commenters suggested that Congress enacted CAA sec. 211(h) to limit volatility and that EPA's action to increase the volatility of E15 under our new interpretation conflicts with the plain language of CAA sec. 211(h)(4), which only provides the 1-psi waiver for E10.

Some commenters indicated that the lack of language such as "at least" 10 percent or "a minimum of 10 percent" indicates that Congress intended 10 to mean precisely 10. Commenters suggested that the term does not need modifiers such as "at least" because even without modifying terms "contains" is commonly understood to mean the amount specified and not a greater amount.

Commenters also indicated that the first dictionary definition of "contain" in the Merriam-Webster dictionary is "to keep within limits," and that the first definition provides a word's primary meaning. Commenters also pointed to the third Merriam-Webster definition, which defines "contain" as "be equivalent to." They suggest that these definitions are in conflict with EPA's interpretation.

Commenters also suggested that "containing" must be read with the term "percent," because percents refer to a specific proportion.

Commenters stated that we did not point to "a single statutory provision where Congress used the word "contain" in the context of a percentage to establish a minimum amount," nor a common usage where "containing x percent" means "containing more than x percent."

Other commenters pointed to the use of the term "and" in the statutory phrase "contains gasoline and 10 percent . . . ethanol" as indicating a precise ethanol content, not a floor. They argued that "and" means "all of the requirements must be satisfied."

Commenters suggested that when Congress used the term "at least" when it intended a statutory provision to be a minimum and that Congress did not use the term in CAA sec. 211(h)(4).

Several commenters pointed to the introduction of legislation purporting to provide E15 the 1-psi waiver as evidence that the current statute cannot be read to provide E15 the 1-psi waiver.

Commenters suggested that EPA's prior interpretation of CAA sec. 211(h)(5) in conjunction with CAA sec. 211(h)(4) was justified because that interpretation allowed states to opt out of the waiver for higher or lower ethanol blends. Any other interpretation would conflict with CAA sec. 211(h)(5).

Some commenters suggested that our interpretation is consistent with legislative history because the House legislative text employed the language "at least 10 percent" and the Senate Report stated that "the 1-psi waiver would allow ethanol blending to continue to be a viable alternative fuel, with its beneficial environmental, economic, agricultural, energy security, and foreign policy implications." Other commenters argued that the legislative history did not support our interpretation of CAA sec. 211(h)(4).

Commenters suggested that in describing the enactment of the CAA Amendments of 1990, we confirmed that Congress intended for the reference to ten to be a ceiling. They also suggested that the decision by Congress to use the phrase "containing 10" was a conscious choice to codify 10 percent, not any higher volume percent, and thus superseded EPA's discretion.

Commenters also pointed to the decision by Congress to codify the 1-psi waiver as applying to "gasoline containing 10 percent . . . ethanol" in contrast to EPA's pre-1990 regulations which used the phrase "at least 9% ethanol." They also noted that we changed our regulations to codify 9-10 percent ethanol after CAA sec. 211(h)(4) was enacted.

Commenters also pointed to additional provisions enacted in the CAA Amendments of 1990 and in the CAA more generally that utilize language such as "at least," or "not less than" when establishing a percentage floor. Commenters pointed out that the term "at least" is used nine times within CAA sec. 211.

Commenters pointed specifically to a 1987 statute where Congress utilized the following language: "motor fuels that contain at least 10 percent ethanol."

Commenters stated that EPA can only read the statutory language to "promote ethanol blending" only up to 10 percent, not any higher. Others suggested there was nothing to suggest that Congress intended promote ethanol use more generally than the use of E10. In the context of the RFS program, commenters pointed to the greater required volumes of advanced biofuels over corn ethanol as evidence that Congress intended to promote biofuels other than corn ethanol.

Commenters stated that committee testimony from the President and CEO of the RFA is not legislative history. They also suggest that it is unpersuasive as Mr. Vaughn noted that the "[CAA] itself... prohibits addition of more than 10 percent ethanol," and that the purpose of his testimony was to limit the volatility of base gasoline, rather than allowing a 1-psi waiver.

Response:

We are interpreting language in CAA sec. 211(h)(4) as establishing a lower limit, or floor, on the minimum ethanol content for the 1-psi waiver from the volatility standard in CAA sec. 211(h)(1), rather than an upper limit on the ethanol content. Under this new interpretation, gasoline-ethanol blends containing at least 10 percent ethanol that are either substantially similar under CAA sec. 211(f)(1) or granted a waiver under CAA sec. 211(f)(4) would receive the 1-psi waiver. We are also reading the criterion in CAA sec. 211(h) (4)(B) that allows for the use of the "deemed to comply" provision as applying to the waiver condition specifying the ethanol content of the fuel. In the MMR, EPA had declined to extend the 1- psi waiver to E15 largely on the premise of the additional criterion for the 1- psi waiver contained in the "deemed to comply" provision. Under the interpretation in this action, a gasoline-ethanol blend with either 10 or 15 percent ethanol contains an ethanol portion that does not exceed the CAA sec. 211(f)(4) waiver condition. The reading in this action harmonizes all relevant provisions and removes the anomalous result where a sole ethanol blend receives the 1-psi waiver. Specifically, it would mean that the 1-psi waiver is equally applicable to gasoline-ethanol blends the agency finds are sub sim under CAA sec. 211(f)(1) and those gasoline-ethanol blends that receive or have received a CAA sec. 211(f)(4) waiver. At present, these are E10 and E15, based on EPA's prior issuance of partial waivers under CAA sec. 211(f)(4), and the finding in this rulemaking that E15 is sub sim to Tier 3 E10 certification fuel.

The CAA does not define the term "containing" in the phrase "fuel blends containing gasoline and ten percent ethanol" in CAA sec. 211(h)(4). Additionally, as a general matter, where Congress employs the conjunctive "and" any listed requirement must be fulfilled. Among the various dictionary and ordinary meanings of "containing," EPA relied on the dictionary meaning that would make the most sense and provides meaning to the reading of CAA sec. 211(h)(4).² As explained in the NPRM, "containing" is defined as "to have within: hold." Under this meaning, we read CAA sec. 211(h)(4) as setting the minimum ethanol content, such that all gasoline-ethanol blends that contain at least 10 percent ethanol may receive the 1-psi waiver, as well as gasoline-ethanol blends that contain more than 10 percent ethanol. We also explained that because E15 has within it or holds 10 percent denatured anhydrous ethanol, it meets this

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¹ While any gasoline- ethanol blend containing at least 10 percent ethanol would receive the 1-psi waiver, that does not mean that gasoline-ethanol blends higher than E15 can be introduced into commerce at 10.0 psi. As discussed in Section 1.4 of this RTC document, in order for these fuels to be introduced into commerce, they must be substantially similar to certification fuel or have a waiver from the substantially similar requirement. Therefore, once this action is finalized, only E10 and E15 may be introduced into commerce at 10.0 psi.

² See *General Dynamics Land Systems v. Cline*, 540 U.S. 581, 596 (2004) (finding that "age" has several commonly understood meanings which should be interpreted in the context used).

³ Webster's Third New International Dictionary 491 (unabridged ed. 1981). See also American Heritage Dictionary online 2019, defining "containing" as "to have within; hold."

⁴ We are not changing our interpretation of the term 10 volume percent, which includes as little as 9 volume percent, to continue to provide the necessary blending flexibility for E10 blends. Comments requesting that EPA revise its interpretation to exclude ethanol blends containing between 9 and 10 volume percent ethanol are outside the scope of this action, since EPA proposed only to interpret CAA sec. 211(h)(4) to apply to blends higher than 10 volume percent ethanol and did not propose to revise its interpretation that blends containing 9 volume percent ethanol were also receive the 1-psi waiver. Moreover, the text of CAA sec. 211(h)(4) encompasses E10, and, as explained in regulations implementing CAA sec. 211(h)(4), we stated that requiring exactly 10 volume percent ethanol "would place a next to impossible burden on ethanol blenders," and that "[t]he nature of the blending process itself . . . further complicates a requirement that the ethanol portion of the blend be exactly 10 percent ethanol." See 56 FR 24245 (May 29, 1991).

definition of "containing" and should receive the 1-psi waiver specified in CAA sec. 211(h)(4). In other words, E15 is a gasoline-ethanol blend that "contains" both gasoline and 10 percent ethanol. As previously noted, prior to this action, both E10 and E15 are introduced into commerce based on sub sim waivers under CAA sec. 211(f)(4). In this action, we are making a sub sim determination for E15 under CAA sec. 211(f)(1). Under commenters' preferred reading, the 1-psi waiver would not be available to gasoline-ethanol blends containing more than 10 percent ethanol, despite our finding that E15 is sub sim to Tier 3 E10 certification fuel, and commenters do not explain why "containing" should be read in that manner. Not surprisingly, they offer definitions of "containing" that are considerably more constraining. For example, commenters suggest that "contain" must mean to keep within limits, or to be equivalent to. One commenter claimed that a reference to gasoline "containing" a specific percentage of ethanol is a relative term and must mean only the specified percent – no more, and no less. While there may be different common meanings of the word "containing," EPA's interpretation is one of those common meanings (i.e., to have, or hold within) and is reasonable in the context of CAA sec. 211(h)(4). We disagree that "containing" must be interpreted in such a restrictive and limiting manner given that it yields an anomalous result where the 1-psi waiver would be applicable to only E10. This select treatment is even more perplexing when viewed against the similar approximate 1 psi increase in gasoline that results from blending 15 percent ethanol and which CAA sec. 211(h)(4) was designed to accommodate for 10 percent ethanol in the 1990 CAA Amendments. As shown in the final rule, EPA's authority to make substantially similar determinations and issue waivers under CAA secs. 211(f)(1) and (4) remains unconstrained. These provisions address requirements for the first introduction into commerce of fuels and fuels additives. ("Title II of the Act . . . establishes a comprehensive scheme for regulating motor vehicle emission and fuel standards for the prevention and control of air pollution." *Ethyl Corp.* v. EPA, 51 F.3d 1053, 1054 (D.C. Cir. 1995)). Specifically, EPA in this action is making a sub sim determination for E15 under CAA sec. 211(f)(1). None of these commenters, however, provide an explanation as to why "containing" should be read in order to limit the 1-psi waiver to E10.

As also explained in the final rule, at the time implementing regulations for RVP were issued under both CAA sec. 211(c) prior to the enactment of CAA sec. 211(h), and under CAA sec. 211(h), the highest permissible ethanol content was 10 percent ethanol as a result of the 1978 CAA sec. 211(f)(4) waiver. In describing regulations promulgated under CAA sec. 211(c), we explained that the 1-psi allowance was "for blends of gasoline with about 10 percent ethanol, or gasohol." In specific regulations, we also codified the CAA sec. 211(f)(4) waiver, providing that "[t]he maximum ethanol content ... in gasoline shall not exceed any applicable waiver conditions under CAA sec. 211(f)(4) waiver." Additionally, at the time EPA had explained that the imprecise nature of gasoline-ethanol blending would confound compliance and enforcement of an exact ethanol content limit: "the nature of the blending process . . . complicates a requirement that the ethanol portion of the blend be exactly 10 percent ethanol." Further, in 2011, when EPA declined to extend the 1-psi waiver to E15, the Agency's interpretation was premised largely on the above-referenced implementing regulations and the additional criterion

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⁵ 55 FR 23660 (June 11, 1990).

⁶ 55 FR 23660 (June 11, 1990) and 40 CFR 80.27(d)(2) (1987).

⁷ 56 FR 24245 (May 29, 1991).

for the 1-psi waiver specified in CAA sec. 211(h)(4)(B). Nothing in these prior EPA interpretations, however, sheds light on how the Agency is to read "containing," especially in the context of a gasoline-ethanol blend that EPA finds is sub sim under CAA sec. 211(f)(1). As previously shown, EPA's authority to make sub sim determinations and issue waivers under CAA sec. 211(f)(1) and (4) remains unconstrained; in other words, EPA's authority under those provisions is not limited to gasoline with a certain range of ethanol content. For instance, EPA in this rulemaking is making a finding of sub sim for E15 under CAA sec. 211(f)(1). It is therefore not reasonable to say that Congress allowed for continued agency action for gasoline-ethanol blends under CAA sec. 211(f)(1) and (4) (i.e., making a sub sim determination or granting a waiver for gasoline-ethanol blends other than E10) while also requiring EPA to continue limiting the 1-psi waiver to only 10 percent ethanol.

As also explained in the NPRM, we can look to the use of the term "containing," given the purpose and context of CAA sec. 211(h)(4). ("Words that can have more than one meaning are given content, however, by their surroundings." FDA v. Brown & Williamson Tobacco Corp., 529 U.S. 120, 132-133 (2000)). Given the ambiguity of this term, EPA's construct only needs to be a reasonable one and neither the best nor only reading of "containing." ("Even if the statute does not compel EPA's reading, and indeed even if EPA's reading is not the better reading, the statute at a minimum is sufficiently ambiguous on this point to permit EPA's reading."). Where as in this instance, EPA is confronted with a reading of a provision that was enacted at the time when the highest permissible ethanol content was E10, this connotation of "containing" as specifying a minimum limit or floor on the ethanol content for fuel blends to qualify for the 1-psi waiver in CAA sec. 211(h)(4) is a permissible reading that gives meaning to the phrase "fuel blends containing gasoline and 10 percent denatured anhydrous ethanol." It is neither strained nor contrived but rather allows EPA as the agency tasked with administering the CAA to give effect and meaning to the terms of a relevant provision. (This is as compared to a reading of "modify" as meaning "to make a basic or important change" instead of the ordinary dictionary meaning that connotes incremental changes. MCI Tel. Corp. v. American Tel. & Tel. Co., 512 U.S. 218, 226 (1994).) Many commenters cited to EPA's previous interpretation of CAA sec. 211(h)(4) in the MMR as a reason why EPA's new interpretation is flawed. We also do not find these arguments persuasive because of EPA's inherent authority to reconsider, revise, or repeal past decisions to the extent permitted by law, provided that we have a reasoned explanation. This authority exists in part because EPA's interpretations of the statutes we administer "are not carved in stone." An agency "must consider varying interpretations and the wisdom of its policy on a continuing basis."11 This is true when, as is the case here, review is undertaken "in response to changed factual circumstances or a change in administration." EPA must also be cognizant where we are changing a prior position that the revised position is permissible under the statute and must articulate a reasoned basis for the change. ¹³ In this case, EPA's

⁸ See 76 FR 44406, 44433-35 (July 25, 2011).

⁹ NRDC v. EPA, 749 F.3d 1050, 1060 (D.C. Cir. 2014)

¹⁰ Chevron U.S.A. Inc. v. NRDC, Inc., 467 U.S. 837, 863 (1984).

¹¹ Id. at 863–64.

¹² Nat'l Cable & Telecomms. Ass'n v. Brand X Internet Servs., 545 U.S. 967, 981 (2005). See also Nat'l Ass'n of Home Builders v. EPA, 682 F.3d 1032, 1043 (D.C. Cir., 2012) (change in administration is a "perfectly reasonable basis" for an agency's reappraisal of its regulations and programs).

¹³ FCC v. Fox Television Stations. Inc., 556 U.S. 502, 515.

interpretation of the text of CAA sec. 211(h)(4) is a reasonable one and take into account changed circumstances that have arisen since we issued the partial waivers for E15 in 2010 and 2011. ("The power of an administrative agency to administer a congressionally created . . . program necessarily requires the formulation of policy and the making of rules to fill any gap left, implicitly or explicitly, by Congress." ¹⁴).

In the NPRM, we also explained that the phrase "fuel blends containing gasoline and ten percent ethanol," was ambiguous given the absence of modifiers such as "at least," or "not more than." 15 We then explained that Congress could legislate and would have likely employed terms connoting either a minimum content limit such as CAA sec. 211(m)(2) or a maximum ethanol content limit similar to CAA secs. 211(h)(4) and (k). We therefore posited that the lack of modifiers could support our reading that Congress established a lower limit on the minimum ethanol content for the 1-psi waiver rather than an upper limit on the ethanol content. Both above-referenced provisions are mandatory gasoline content provisions that also employ specific units of measurement as an indication of measurement precision. CAA sec. 211(m)(2) provides that "gasoline is to be blended to contain not less than 2.7 percent oxygen by weight." CAA sec. 211(k)(3)(A)(1) provides that "[t]he benzene content of reformulated gasoline shall not exceed 1.0 per cent by volume;" CAA sec. 211(k)(3)(A)(ii) provides that "[t]he aromatics hydrocarbon content of the reformulated gasoline shall not exceed 25 percent by volume." We further noted that CAA sec. 211(h)(1) employs the modifier "in excess" as compared to CAA sec. 211(h)(4). But Congress notably did not use any modifier in CAA sec. 211(h)(4), which sets out a relaxation of a mandatory provision. In response to our proposal, commenters also cited specific provisions set out in CAA sec. 211(o) as support for their view that lack of modifiers in this phrase evinces Congressional intention to limit the 1 psi waiver to E10. To the contrary, we view the lack of modifiers in this phrase, as compared to provisions cited by commenters, as support that Congress can legislate and thus would have included modifiers in this provision had it intended to limit applicability of the 1-psi waiver. Further, except for CAA sec. 211(c)(4)(C)(v)(V), which sets out EPA authority to waive preemption and approve a fuel into a state implementation plan, most if not all referenced provisions by commenters are mandatory gasoline content provisions that also employ specific units of measurement as an indication of measurement precision. It, therefore, appears that Congress made a deliberate choice—where Congress sought to impose mandatory fuel content requirements, such as in CAA secs. 211(k) and (m), it utilized modifiers as compared to where it set out an allowance or relaxation of a mandatory requirement such as CAA sec. 211(h)(4) for RVP. In other words, where Congress intended to impose a "no greater than" requirement addressing fuel properties, it explicitly did so. In contrast, in CAA sec. 211(h)(4), Congress included no such language. Additionally, Congress employed modifiers where fuel content or properties were of a nature subject to precise determination but as also shown elsewhere in this preamble, Congress promulgated the deemed to comply provision in response to measurement imprecision resulting from splash blending

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¹⁴ Chevron U.S.A. Inc. v. NRDC, Inc., 467 U.S. 837, 843 (1984).

¹⁵ Commenters cite to certain other subsections of CAA sec. 211 for the proposition that Congress knew how to set a minimum content level and in 211(h)(4) would have said "containing at least" if that is what they meant. However, those other provisions are distinguishable because they appear in completely different contexts, and none address a fuel component or property. See, e.g., CAA sec. 211(c)(4)(C)(v)(V) (refers to "at least" one state implementation plan in a Petroleum Administration for Defense District as a prerequisite to EPA approval of a state boutique fuels program), and provisions in CAA sec. 211(o) defining different types of renewable fuels, which require "at least" a certain percentage reduction of lifecycle GHG emissions.

ethanol into gasoline. These provisions thus reflect a deliberate and intentional scheme, confirm our view that Congress can legislate and that the omission of modifiers in CAA sec. 211(h)(4) was deliberate and intentional. Given the lack of modifiers for the term "containing," in contrast to the other statutory provisions referenced above, there is support for our reading that this term as employed in the phrase "fuel blends containing gasoline and ten percent ethanol" is ambiguous and thus, provides room for EPA to make interpretive and policy choices.

We also disagree with the comment that we did not cite "a single statutory provision where Congress used the word 'contain' in the context of a percentage to establish a minimum amount," nor a common usage where "containing x percent" means "containing more than x percent." In the NPRM we referenced CAA sec. 211(m)(2) in our discussion on the lack of modifiers as an indication of ambiguity in the phrase "fuel blends containing gasoline and ten percent ethanol." But even the presence of modifiers does not necessarily indicate the lack of ambiguity rather, as previously explained, it is context that sheds light on Congressional intent. Notably, we have read the phrase "contain not less than 2.7 percent oxygen by weight" in CAA sec. 211(m)(2) as ambiguous and thus, connoting only the minimum oxygenate content in gasoline during the wintertime. (Exxon Mobil v. EPA, 217 F.3d 1246, 1251 (9th Cir. 2000) (upholding EPA construct because "[i]t is not obvious from this text whether Congress intended to require that a specific 2.7 percent minimum be adopted or that a minimum 'not less than' 2.7 percent be adopted. No unambiguous congressional intent can be discerned from reading this particular provision alone."). Another commenter argued that a 2017 introduced bill language to add the modifier "and more" to the phrase "for fuel blends containing gasoline and ten percent ethanol," supported a reading for limiting the applicability of the 1-psi waiver. As a general matter, views expressed in subsequent Congressional sessions are of limited persuasive authority in statutory interpretation (Statements made in subsequent Congressional session are a "hazardous basis for inferring the intent of an earlier one." U.S. v. Price, 361 U.S. 304, 313 (1960)). We also note that this legislation was never enacted. Most important, however, is that commenters essentially advocate for statutory obsolescence as well as for EPA to seek Congressional fixes each time there is a gap in the statute it administers. We disagree with these views most especially because as previously explained, the EPA as the agency tasked with implementing CAA sec. 211(h)(4) "may fill any gap left, implicitly or explicitly, by Congress." ¹⁶ But "without regulatory flexibility, changing circumstances and scientific developments would soon render the Clean Air Act obsolete." Massachusetts v. EPA, 549 U.S. 497, 532, (2007).

Further, in reviewing our prior interpretation articulated in the MMR, we again considered the limited legislative history on CAA sec. 211(h)(4) and we found that it also supports our reading of the phrase "fuel blends containing gasoline and 10 percent denatured anhydrous ethanol" as ambiguous. CAA sec. 211(h)(4) reflects the language adopted in section 214 of the Senate bill and its legislative history indicates that a 1-psi waiver is allowed "for fuel blends containing gasoline and 10 per centum denatured anhydrous ethanol."¹⁷ A companion bill in the House provided a 1 psi waiver for blends of gasoline and ethanol "containing at least 10 percent

¹⁶ Chevron U.S.A. Inc. v. NRDC, Inc., 467 U.S. 837, 843 (1984).

¹⁷ Clean Air Act Amendments of 1990, S. 1630, 101st Cong. § 214 (1990), 101st Cong., 2d Sess. at 262 (April 3, 1990); reprinted at 3 A Legislative History of the Clean Air Act Amendments of 1990 at 4380 (1993) (Leg. Hist.).

ethanol."18 The provision in the House bill also explains that the 1-psi waiver was designed to "permit gasoline containing at least 9 but not more than 10 percentum ethanol (by volume) to exceed the applicable Reid Vapor pressure requirements by up to 1.0 psi." In addition, relevant legislative history from a 1987 Senate bill, which was prior to adoption of the 1990 Amendments, where Congress considered a legislative provision that was identical in relevant part to both section 214 of the Senate bill and section 211(h)(4) states in pertinent part that "blenders [would] be able to demonstrate compliance with the RVP limit by providing . . . a certification that the blended fuel meets the waiver conditions of the Clean Air Act (that is, the ethanol portion does not exceed 10 percent by volume of the final fuel)."20 EPA is not aware of any conference or committee reports, or other legislative history explaining why Congress ultimately enacted the language in the CAA Amendments in lieu of the language in the House Bill and commenters have not provided any such explanation. There is no discussion, for example, of whether Congress felt that "containing" was sufficiently specific, or whether, as discussed above, the nature of the blending process was likely to make a requirement of "at least" ten percent difficult to meet in practice. At proposal we had also noted the legislative history, where Congress employed the term "at least" 10 percent ethanol when discussing the 1psi waiver and explained that it suggested this provision specified a floor for ethanol content in gasoline. We gave the example of section 216 of the House bill, which provided in part that "[a] manufacturer or processor of gasoline containing at least 10 percent ethanol shall be deemed in full compliance."²¹ Based on this example, commenters suggested that the failure to enact the House version of the bill indicates congressional intent to preclude the interpretation articulated in the House bill and as such that we lack support for today's interpretation. We disagree. If anything, the different versions of CAA sec. 211(h) prior to enactment further demonstrates ambiguity in the phrase "containing gasoline and ten percent" ethanol. As shown above, some of the available legislative history relates to the statutory "deemed to comply" provision that Congress enacted at the inception of the RVP program to address industry practices at the time, and in short, to accommodate E10, which was the highest permissible ethanol content at that time under the terms of the 1978 CAA sec. 211(f)(4) waiver. Specifically, and as also previously discussed, Congress enacted this provision because it considered EPA's proposed enforcement mechanism for the 1 psi waiver as "totally unworkable." EPA's then proposal was in recognition of the "imprecise nature of blending" given that ethanol is added after the completion of the refinery processing in a process known as splash blending (as discussed above). At bottom, given that Congress also considered and rejected language that included not to exceed, we do not find the failure to adopt the "containing at least 10 percent" language in the final bill persuasive as to whether Congress intended that meaning to be precluded under the statute. In sum, the phrase "fuel blends containing gasoline and ten percent ethanol" is ambiguous, but as previously discussed, EPA as the agency tasked with implementing CAA sec. 211(h)(4) is

¹⁸ Clean Air Act Amendments, S. 1630, 101st Cong. § 216 (1990) 101st Cong., 2d Sess. at 294 (May 23, 1990); reprinted at 2 Leg. Hist. at 2102.

¹⁹ Clean Air Act Amendments of 1989, H.R. 3030, 101st Cong. § 214 (1989), 101st Cong., 1st Sess. at 170 (July 27, 1989); reprinted at 2 Leg. Hist. at 3906 (1993). See also, H.R. Rep. No. 101-490 at 71 and 312 (1990) (Conf. Rep.); reprinted at 2 Leg. Hist. at 3095 and 3336 (1993).

²⁰ S. Rep. No. 100-231, 100th Cong. 1st Sess. at 149-150 (1987).

²¹ Clean Air Act Amendments, H.R. 3030 (101st Congress, 1990). See also H.R. Rep. No. 101 -490, at 71 (1990) (Conf. Rep.); reprinted at 2 Leg. Hist. at 3095 (1993).

²² S. Rep. No. 100-231, 100th Cong. 1st Sess. at 149 (1987).

interpreting this provision in a reasonable manner, which is consistent with the reading articulated in the House bill (i.e., gasoline that contains at least 10 percent ethanol receives the 1-psi waiver).²³

Some commenters also cited EPA's previous interpretation of CAA sec. 211(h)(4) in the MMR as reasons why today's interpretation is flawed. We have also reviewed our prior reading of this provision in the MMR, where we declined to extend the 1 psi waiver to E15 and instead interpreted CAA sec. 211(h)(4) as providing a 1-psi waiver for fuel blends of gasoline and at least 9 volume percent ethanol and not more than 10 volume percent ethanol. First, as noted above, EPA retains the authority to revisit and revise a prior interpretation, provided we have a reasoned explanation for doing so. In declining to extend the 1 psi waiver to E15 in the MMR, we premised the reading on the additional criterion for the 1 psi waiver contained in the "deemed to comply" provision. Specifically, the criterion contained in CAA sec. 211(h)(4)(B) that states, "the ethanol portion of the blend does not exceed its waiver condition under subsection (f)(4)." CAA sec. 211(h)(4)(B). In sum, we explained that CAA sec. 211(h)(4)(B) "refers to the ethanol blend not exceeding its section 211(f)(4) waiver conditions and does not explicitly refer to 10% ethanol."²⁴ At the time of the MMR, EPA had granted two CAA sec. 211(f)(4) waivers that included conditions such as E15 not exceeding an RVP of 9.0 psi from May 1 through September 15. We have also reviewed our prior reading of this additional criterion in the MMR. As explained in the NPRM, Congress enacted CAA sec. 211(h)(4) when 10 percent ethanol was the highest permissible ethanol content in gasoline as a result of the CAA sec. 211(f)(4) waiver that allowed for its introduction into commerce as far back as 1978. As also explained at proposal, Congress promulgated CAA sec. 211(h)(4)(B) as an additional criterion for the 1-psi waiver. It refers to the ethanol blend not exceeding its CAA sec. 211(f)(4) waiver conditions but does not explicitly refer to 10 percent ethanol. Additionally, EPA did not impose any waiver conditions under CAA sec. 211(f)(4) for E10. Rather, E10 was granted a waiver by operation of law under the statutory scheme that existed in 1978 and there is no CAA sec. 211(f)(4) waiver condition. As part of the interpretation of CAA sec. 211(h)(4) in this action, we are also reading the criterion that "the ethanol portion of the blend does not exceed its waiver condition under subsection (f)(4)" as applying to only the waiver condition specifying the ethanol content of the fuel. Under this reading, a gasoline blended with either 10 or 15 percent ethanol contains an ethanol portion that does not exceed the CAA sec. 211(f)(4) waiver condition, as both E10 and E15 have CAA sec. 211(f)(4) waivers. Further, even though the statutory text requires that "the ethanol portion of the blend does not exceed its waiver condition under subsection (f)(4) of this section," the ethanol portion prescribed under the CAA sec. 211(f)(4) waiver condition and the CAA sec. 211(f)(1) sub sim definition for E15 are identical. The regulatory deemed to comply provision would therefore apply and thus remains a defense against liability for any gasolineethanol blend that has either received a CAA sec. 211(f)(4) waiver or that is sub sim under CAA sec. 211(f)(1).

Finally, we also disagree with the comment that EPA's prior interpretation of CAA sec. 211(h)(5) in conjunction with CAA sec. 211(h)(4) was justified because that interpretation

²³ See *Edison Electric Inst. v. EPA*, 2 F.3d 438, 451 (D.C. Cir. 1993) (holding that "the deletion of a word or phrase in the throes of the legislative process does not ordinarily constitute, without more, evidence of a specific legislative intent.").

²⁴ 76 FR 44406, 44434 (July 25, 2011).

allowed states to opt out of the waiver for higher or lower ethanol blends as compared to our new interpretation. As explained in the NPRM, CAA sec. 211(h)(5) also contains the language "fuel blends containing gasoline and ten percent denatured anhydrous ethanol." We explained that our changed interpretation of CAA sec. 211(h)(4) also has implications for CAA sec. 211(h)(5), which allows states to opt out of the 1-psi wavier provided by CAA sec. 211(h)(4) for particular areas upon a showing that the 1-psi waiver will increase emissions that contribute to air pollution. Because the language in CAA sec. 211(h)(5) pertaining to the 1-psi waiver is identical to the language in CAA sec. 211(h)(4), and both refer to the 1-psi waiver, both sections should be read together to apply the 1-psi waiver to E10 and E15. Accordingly, we interpret CAA sec. 211(h)(5) to allow states to opt out of the 1-psi waiver provided by CAA sec. 211(h)(4) for fuel blends containing gasoline and 9–15 percent denatured anhydrous ethanol.

Under commenters' reading of CAA sec. 211(h)(4), only parties that blend E10 would be able to avail themselves of the 1-psi waiver. We disagree with this notion that Congress intended a partial and preferential treatment for E10 while allowing for continued agency exercise of authority under CAA sec. 211(f) and increased use of ethanol under CAA sec. 211(o). Further, for example, because blending 15 volume percent ethanol into gasoline would result in an approximate 1.0 psi RVP increase, similar to E10, the resultant RVP for any blended fuel would be no higher than the RVP standard plus the 1-psi waiver, which is currently 10.0 psi for a gasoline-ethanol blended fuel containing 10 percent ethanol.²⁵ Commenters posture, therefore, makes no sense in the context of the overall fuels and fuel additive regulatory scheme, such as CAA sec. 211(f) as compared to our new interpretation.

Comment:

Some commenters suggested that it was inappropriate for EPA to include ethanol between 9 and 10 percent under our reading of the statute as meaning "containing at least 10 percent." They suggested that allowing 9-10 volume percent ethanol was done at the time of our 1991 volatility regulations because parties could not receive the 1-psi if they blended over 10 volume percent. They argued that with this rulemaking parties are able to blend over 10 volume percent and receive the 1-psi waiver.

Response:

We are not changing our interpretation of the term 10 volume percent, which includes as little as 9 volume percent, to continue to provide the necessary blending flexibility for E10. Comments requesting that EPA revise its interpretation to exclude gasoline-ethanol blends containing between 9 and 10 volume percent ethanol are outside the scope of this action, since EPA proposed only to interpret CAA sec. 211(h)(4) to apply to blends higher than 10 volume percent ethanol and did not propose to revise its interpretation that blends containing 9 volume percent ethanol also receive the 1-psi waiver. Moreover, the text of CAA sec. 211(h)(4) encompasses E10, and, as explained in regulations implementing CAA sec. 211(h)(4), we stated that requiring exactly 10 volume percent ethanol "would place a next to impossible burden on ethanol blenders," and that "[t]he nature of the blending process itself . . . further complicates a

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²⁵ This is true for E15 made from blends of certified gasoline or BOB and ethanol. This volatility relationship is not maintained when other products (e.g., natural gas liquids) are blended to make E15.

requirement that the ethanol portion of the blend be exactly 10 percent ethanol." See 56 FR 24245 (May 29, 1991).

Comment:

Commenters suggested that legislative history exists that "ethanol-enhanced high-octane fuels were recognized as the best available option for replacing octane from aromatic hydrocarbons and thereby reducing toxic emissions."

Response:

Commenters did not provide a citation for this assertion. In the rule, we acknowledged that Congress described the 1-psi waiver as a provision that would "allow ethanol blending to continue to be a viable alternative fuel, with its beneficial environmental, economic, agricultural, energy security and foreign policy implications." The interchangeability of aromatics and ethanol is not present in legislative history for the 1-psi waiver.

Comment:

Commenters suggested that EPA conflates regulatory history with legislative history, contending that EPA's regulatory actions with respect to volatility cannot inform what Congress intended, and that the imprecise nature of the blending process only allows for a compliance margin below the precise blend, not additional flexibility above the volume of ethanol.

Response:

In the NPRM, we explained that the phrase "fuel blends containing gasoline and ten percent ethanol," was ambiguous. As also explained in the final rule preamble, implementing regulations for RVP were issued under both CAA sec. 211(c) prior to the enactment of CAA sec. 211(h), and under CAA sec. 211(h), when the highest permissible ethanol content was 10 percent ethanol as a result of the 1978 CAA sec. 211(f)(4) waiver. In describing regulations promulgated under CAA sec. 211(c), we explained that the 1-psi allowance was "for blends of gasoline with about 10 percent ethanol, or gasohol." Additionally, EPA had explained that the imprecise nature of ethanol-gasoline blending would confound compliance and enforcement of an exact ethanol content limit: "the nature of the blending process . . . complicates a requirement that the ethanol portion of the blend be exactly 10 percent ethanol." Nothing in these prior agency interpretations, however, sheds light on how the agency is to read "containing," especially in the context of a gasoline-ethanol blend that EPA finds is sub sim under CAA sec. 211(f)(1).

As also shown above, in light of the ambiguity in the phrase "fuel blends containing gasoline and 10 percent denatured anhydrous ethanol" we had to consider the limited legislative history on CAA sec. 211(h)(4). Some of this available legislative history for CAA sec. 211(h)(4) relates to the statutory "deemed to comply" provision that Commenter references and Congress had enacted at the inception of the RVP program to address industry practices at the time, and in short, to accommodate E10, which was the highest permissible ethanol content at that time under the terms of the 1978 CAA sec. 211(f)(4) waiver. Specifically, and as also previously discussed, Congress enacted this provision because it considered EPA's proposed enforcement mechanism

²⁶ 55 FR 23660 (June 11, 1990).

²⁷ 56 FR 24245 (May 29, 1991).

for the 1-psi waiver as "totally unworkable." EPA's then proposal, was in recognition of the "imprecise nature of blending" given that ethanol is added after the completion of the refinery processing in a process known as splash blending (as discussed above). Further, Congress promulgated CAA sec. 211(h)(4)(B) as an additional criterion for the 1-psi waiver. It refers to the gasoline-ethanol blend not exceeding its CAA sec. 211(f)(4) waiver conditions but does not explicitly refer to 10 percent ethanol. ("[T]he ethanol portion of the blend does not exceed its waiver condition under subsection (f)(4)). As also explained above, CAA sec. 211(h)(4) reflects the language adopted in section 214 of the Senate bill and its legislative history indicates that a 1-psi waiver is allowed "for fuel blends containing gasoline and 10 per centum denatured anhydrous ethanol."²⁹ A companion bill in the House provided a 1-psi waiver for blends of gasoline and ethanol "containing at least 10 percent ethanol." The provision in the House bill also explains that the 1-psi waiver was designed to "permit gasoline containing at least 9 but not more than 10 percentum ethanol (by volume) to exceed the applicable Reid Vapor pressure requirements by up to 1.0 psi."31 Other relevant legislative history from a 1987 Senate bill, which was prior to adoption of the 1990 Amendments, where Congress considered a legislative provision that was identical in relevant part to both section 214 of the Senate bill and section 211(h)(4) states in pertinent part that "blenders [would] be able to demonstrate compliance with the RVP limit by providing . . . a certification that the blended fuel meets the waiver conditions of the Clean Air Act (that is, the ethanol portion does not exceed 10 percent by volume of the final fuel)."32 In the NPRM, we had also noted the legislative history, where Congress employed the term "at least" 10 percent ethanol when discussing the 1-psi waiver and explained that it suggested this provision specified a floor for ethanol content in gasoline. We gave the example of section 216 of the House bill, which provided in part that "[a] manufacturer or processor of gasoline containing at least 10 percent ethanol shall be deemed in full compliance."³³ As explained in the final rule preamble, EPA is not aware of any conference or committee reports, or other legislative history, explaining why Congress ultimately enacted the language in the CAA Amendments in lieu of the language in the House Bill and commenters have not provided any such explanation. There is no discussion, for example, of whether Congress felt that "containing" was sufficiently specific, or whether, as discussed above, the nature of the blending process was likely to make a requirement of "at least" ten percent difficult to meet in practice. In sum, the phrase "fuel blends containing gasoline and ten percent ethanol" is ambiguous, but as previously discussed, EPA as the agency tasked with implementing CAA sec. 211(h)(4) is interpreting this provision in a reasonable manner, and the commenter is incorrect that EPA is "conflating" regulatory history and legislative history. EPA's interpretation of CAA sec. 211(h)(4) is based on

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²⁸ S. Rep. No. 100-231, 100th Cong. 1st Sess. At 149 (1987).

²⁹ Clean Air Act Amendments of 1990, S. 1630, 101st Cong. § 214 (1990), 101st Cong., 2d Sess. at 262 (April 3, 1990); reprinted at 3 A Legislative History of the Clean Air Act Amendments of 1990 at 4380 (1993) (Leg. Hist.). ³⁰ Clean Air Act Amendments, S. 1630, 101st Cong. § 216 (1990) 101st Cong., 2d Sess. at 294 (May 23, 1990);

reprinted at 2 Leg. Hist. at 2102.

³¹ Clean Air Act Amendments of 1989, H.R. 3030, 101st Cong. § 214 (1989), 101st Cong., 1st Sess. at 170 (July 27, 1989); reprinted at 2 Leg. Hist. at 3906 (1993). See also, H.R. Rep. No. 101-490 at 71 and 312 (1990) (Conf. Rep.); reprinted at 2 Leg. Hist. at 3095 and 3336 (1993).

³² S. Rep. No. 100-231, 100th Cong. 1st Sess. at 149-150 (1987).

³³ Clean Air Act Amendments, H.R. 3030 (101st Congress, 1990). See also H.R. Rep. No. 101 -490, at 71 (1990) (Conf. Rep.); reprinted at 2 Leg. Hist. at 3095 (1993).

the statutory text, viewed in the context of Congressional intent and current circumstances, as explained elsewhere in the record for this action.

1.2.2.2 Changed Circumstances

Commenters that provided comment on this topic include but are not limited to: 0573, 0657, 0754, 0799, 0809, 0864, 0872, 0875, 0877, 0878, 0889.

Comment:

Some commenters suggested that there were no changed circumstances to justify EPA's new interpretation of CAA sec. 211(h)(4). They stated that E15 has been allowed into commerce since 2011 and that the legal landscape for E15 has not changed since that time. Some pointed to the existence of the RFS program in 2011, when EPA last interpreted CAA sec. 211(h)(4) as further support for the lack of changed circumstances. They also suggested that E15 has limited market penetration (noting that less than 1 percent of retail outlets nationwide offer E15), and that E15's minor role in the fuels marketplace does not justify our new interpretation. Some commenters suggested that EPA did not have the authority to change statutory provisions based on a changing gasoline marketplace and that the 1-psi waiver is a limited exception to 211(h)(1) that is only applicable to E10.

Other commenters stated that there are indeed changed circumstances including the increased presence of E10 and E15 nationwide since 2011.

Some commenters stated that EPA's action is appropriate because "refiners have excessive control over the fuel market and erect barriers to increasing the volume of ethanol in gasoline." They suggest that the refiners' unwillingness to provide low-RVP blendstock for E15 blending is a reason for EPA's action.

Response:

Our interpretation of CAA sec. 211(h)(4) is reasonable under the text, structure, and purpose of the CAA. Additionally, we find that the presence of ethanol in general, and E15 in particular, in the gasoline marketplace has increased in recent years. See Section II.A.2 of the final rule. As also previously explained in Section 1.2.2.1 of this document, Congress set up a comprehensive regulatory scheme for fuels and fuel additives in CAA sec. 211 and there is no reason as to why Congress would grant partial and preferential treatment for E10 while leaving agency authority to act under CAA secs. 211(f)(1) and (f)(4) unconstrained for other gasoline-ethanol blends and mandating the increased use of ethanol under CAA sec. 211(o).

1.2.2.3 Other Comments on 211(h)(4)

Commenters that provided comment on this topic include but are not limited to: 0799, 0804, 0809, 0820, 0873, 0892, 0908.

Comment:

Commenters suggested that our reading of CAA sec. 211(h)(4) conflicts with other canons of statutory interpretation. First, they note that exceptions are generally "read . . . narrowly to preserve the primary operation of the provision." They also note that this interpretation would lead to "absurd practical results" such as the marketing of a fuel as "containing 10% ethanol" when it actually contains 15 percent ethanol. They also point to other provisions in the CAA that may be interpreted incorrectly if interpreted similar to our interpretation of CAA sec. 211(h)(4) such as CAA sec. 211(j)(2) requiring a study to evaluate gasoline containing 0.1 gram of lead per gallon, and EPA performing a study on 1 or 10 grams of lead per gallon.

Response:

We disagree. First, while statutory exceptions should not be read so broadly as to undermine the primary purpose of the underlying provision, EPA's interpretation of CAA sec. 211(h)(4) does not reach so far. Rather, our interpretation is a reasonable one given the overall purpose of CAA sec. 211(h) and the RVP waiver provided by Congress. See Encino Motorcars v. Navarro, 138 S.Ct. 1134, 1142 (rejecting narrow construction of statutory exemption in favor of a "fair reading" given construct of statute). As previously explained in Section 1.2.2.1, the CAA does not define the term "containing" in the phrase "fuel blends containing gasoline and ten percent ethanol" in CAA sec. 211(h)(4). Nothing in prior agency interpretations sheds light on how the agency is to read "containing," especially in the context of a gasoline-ethanol blend that EPA finds is sub sim under CAA sec. 211(f)(1). Therefore, there is support for our reading that this term as employed in the phrase "fuel blends containing gasoline and ten percent ethanol" is ambiguous and provides room for EPA to make interpretive and policy choices. Given the ambiguity of this term, EPA's task of "administer[ing] a congressionally created . . . program necessarily requires the formulation of policy and the making of rules to fill any gap left, implicitly or explicitly, by Congress."³⁴ As also previously explained in Section 1.2.2.1, Congress set up a comprehensive regulatory scheme for fuels and fuel additives in CAA sec. 211 and there is no reason as to why Congress would grant partial and preferential treatment for E10 while leaving agency authority to act under CAA secs. 211(f)(1) and (f)(4) unconstrained and mandating the increased use of ethanol under CAA sec. 211(o). It is therefore not reasonable to read CAA sec. 211(h)(4) to mean that Congress allowed for continued agency action for gasoline-ethanol blends under CAA secs. 211(f)(1) and (f)(4) while also requiring EPA to continue limiting the 1-psi waiver to only 10 percent ethanol. Given our determination that E15 is sub sim to Tier 3 E10 certification fuel under sec. 211(f)(1), a reading restricting the 1-psi waiver to only E10 would be an anomalous result because blending 15 volume percent ethanol into gasoline results in an approximate 1.0 psi RVP increase, similar to E10, and the resultant RVP for any blended fuel would be no higher than 10 psi, which is the RVP standard for a gasoline-ethanol blended fuel containing 10 percent ethanol.

³⁴ Chevron U.S.A. Inc. v. NRDC, Inc., 467 U.S. 837, 843 (1984).

We also disagree with the comment that this interpretation would lead to "absurd practical results" such as the marketing of a fuel as "containing 10% ethanol" when it actually contains 15 percent ethanol. To the contrary, this is no different from our reading of the phrase "contain not less than 2.7 percent oxygen by weight" in CAA sec. 211(m)(2) as connoting the minimum oxygenate content in gasoline during the wintertime and allowing up to 3.5 percent oxygen by weight instead. (*Exxon Mobil v. EPA*, 217 F.3d 1246, 1251 (9th Cir. 2000) (upholding EPA approval of SIP specifying 3.5 percent oxygen by weight under CAA sec. 211(m)(2)).

In sum, today's construct resolves the gap in CAA sec. 211(h)(4) as it relates to the applicability of the 1-psi waiver to higher gasoline-ethanol blends that are sub sim under CAA sec. 211(f)(1), harmonizes relevant statutory provisions and gives effect to the overall fuels and fuel additives regulatory scheme.

We do not anticipate that this action will result in misleading labeling practices. We continue to have labeling requirements for gasoline-ethanol blends containing more than 10 volume percent and no more than 15 volume percent ethanol promulgated in the MMR which would prevent any misleading labeling.

We view comments on how this interpretation may impact other statutory provisions that are not at issue in this rulemaking as beyond the scope of this rulemaking action.

Comment:

Commenters suggested that EPA failed to recognize that the volatility of E30 is lower than E15. They state that by focusing on E15, we are missing an opportunity to "completely eliminate the evaporative emission problem that prompted the 1-psi waiver in the first place" which is "an abdication [of our] obligation to pursue best available technology."

Response:

This comment is beyond the scope of this rulemaking. EPA only proposed to interpret CAA sec. 211(h)(4) to apply to blends higher than 10 percent ethanol, and we did not propose to address whether blends containing more than 15 percent ethanol can or should be introduced into commerce as gasoline.

1.2.3 Deemed to Comply Provision

Commenters that provided comment on this topic include but are not limited to: 0545, 0748, 0809, 0851, 0854, 0864, 0889, 0895, 0913, 0918.

Comment:

Some commenters were supportive of our interpretation of the "deemed to comply" provision such that it is available as a defense for all parties who can use the 1-psi waiver. They objected to an interpretation of the provision as only providing a defense to fuels that have a CAA sec. 211(f)(4) waiver from sub sim because they believed that the intent of the condition is to provide flexibility for gasoline-ethanol blends and should apply either when a fuel's ethanol content does not exceed a waiver under CAA sec. 211(f)(4) or when a waiver is unnecessary because the gasoline-ethanol blend is sub sim under CAA sec. 211(f)(1).

Some commenters suggested we need not resolve this issue in this rulemaking as the CAA sec. 211(f)(4) waivers for E15 will remain in place, and therefore the plain language of the CAA sec. 211(h)(4) "deemed to comply" provision still allows E15 to qualify under the existence of the CAA sec. 211(f)(4) waiver.

Other commenters argued that only gasoline-ethanol blends subject to a waiver under CAA sec. 211(f)(4), not sub sim under CAA sec. 211(f)(1), could benefit from the RVP "deemed to comply provision" at CAA sec. 211(h)(4). They explain that the benefits of the RVP "deemed to comply" provision do not extend to fuels that are sub sim because operating under a CAA sec. 211(f)(4) waiver is a precondition of the deemed to comply provisions explicitly. Some argued that because it would be inappropriate to apply the 1-psi waiver to E15, the deemed to comply provision is only applicable to E10.

Response:

As also previously noted in Section 1.2.2.1, in response to our proposed interpretation some commenters also cited EPA's previous interpretation of CAA sec. 211(h)(4) in the MMR as reasons why today's interpretation is flawed. We have also reviewed our prior reading of this provision in the MMR, where we declined to extend the 1-psi waiver to E15 and instead interpreted CAA sec. 211(h)(4) as providing a 1-psi waiver for fuel blends of gasoline and at least 9 volume percent ethanol and not more than 10 volume percent ethanol. In declining to extend the 1-psi waiver to E15, we premised the reading on the additional criterion for the 1-psi waiver contained in the "deemed to comply" provision. Specifically, the criterion contained in CAA sec. 211(h)(4)(B) that states, "the ethanol portion of the blend does not exceed its waiver condition under subsection (f)(4)." CAA sec. 211(h)(4)(B). In sum, we explained that CAA sec. 211(h)(4)(B) "refers to the ethanol blend not exceeding its section 211(f)(4) waiver conditions and does not explicitly refer to 10% ethanol."35 At the time of the MMR, EPA had granted two CAA sec. 211(f)(4) waivers that included conditions such as E15 not exceeding an RVP of 9.0 psi from May 1 through September 15. In response to comments on the NPRM, we have also reviewed our prior reading of this additional criterion in the MMR. As explained in the NPRM, Congress enacted CAA sec. 211(h)(4) when 10 percent ethanol was the highest permissible

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³⁵ 76 FR 44406, 44434 (July 25, 2011).

ethanol content in gasoline as a result of the CAA sec. 211(f)(4) waiver that allowed for its introduction into commerce as far back as 1978. As also explained in the NPRM, Congress promulgated CAA sec. 211(h)(4)(B) as an additional criterion for the 1-psi waiver. It refers to the gasoline-ethanol blend not exceeding its CAA sec. 211(f)(4) waiver conditions but does not explicitly refer to 10 percent ethanol. Additionally, we did not impose any waiver conditions under CAA sec. 211(f)(4) for E10. Rather, E10 was granted a waiver by operation of law under the statutory scheme that existed in 1978 and there is no CAA sec. 211(f)(4) waiver condition. As part of today's interpretation of CAA sec. 211(h)(4), we are also reading the criterion that "the ethanol portion of the blend does not exceed its waiver condition under subsection (f)(4)" as applying to only the waiver condition specifying the ethanol contains an ethanol portion that does not exceed the CAA sec. 211(f)(4) waiver condition. Further, even though the statutory text requires that "the ethanol portion of the blend does not exceed its waiver condition under subsection (f)(4) of this section," the ethanol portion prescribed under the CAA sec. 211(f)(4) waiver condition and the CAA sec. 211(f)(1) sub sim definition are identical.

Because the CAA sec. 211(f)(4) waiver is a waiver from being "substantially similar," once E15 is found to be sub sim the waiver is no longer needed in order to introduce E15 into commerce. However, as discussed previously, the CAA sec. 211(f)(4) waiver for E15 remains available for the introduction of E15 into commerce, and therefore, in this unique circumstance only, the statutory "deemed to comply" criterion that "the ethanol portion of the blend does not exceed its waiver condition under subsection (f)(4) of this section" can still be satisfied. Our regulations at 40 CFR 80.28, as modified by this action, condition the "deemed to comply" provision on specific ethanol content between 9 and 15 percent by volume and therefore parties producing E15 can utilize the regulatory "deemed to comply" provision.

1.3 Compliance with CAA 211(f)

1.3.1 Waiver Applicability

Commenters that provided comment on this topic include but are not limited to: 0544, 0804, 0839, 0848, 0854, 0864, 0875, 0877, 0878, 0879, 0881, 0882, 0884, 0894, 0895, 0904, 0913.

Comment:

Some commenters suggested that the waiver applicability approach was appropriate and supported our arguments that the waiver conditions apply to fuel and fuel additive manufacturers, but not downstream oxygenate blenders nor blender pumps who make E15 using certified blendstocks and ethanol. These commenters note that the approach is clearly supported in the plain language of the CAA throughout section 211 and that EPA has previously expressed this view in the first E15 waiver decision.³⁶

Response:

We appreciate comments supporting our waiver applicability approach and maintain this interpretation of the statute as further justification in the alternative for the regulatory amendments we are taking in this action. We reiterate, as discussed in the proposal, that CAA sec. 211(f) applies only to manufacturers of fuel or fuel additives (i.e., "fuel manufacturers" and "additive manufacturers" as defined in 40 CFR 79.2). The definition of "fuel manufacturer" at 40 CFR 79.2 explicitly excludes parties "other than a fuel refiner or importer . . . who adds an oxygenate compound to fuel in any otherwise allowable amount" (internal punctuation omitted). Therefore, we find that parties who are not fuel or fuel additive manufacturers do not need to meet the 9.0 psi RVP waiver condition, and thus can provide E15 at 10.0 psi.

Comment:

Commenters suggested that distinguishing between oxygenate blenders and fuel additive manufacturers would be "harmful to refiners and create market disparity if the 1-psi waiver is granted but not allowed for refiners owning terminals and operating as oxygenate blenders at those terminals." Others suggested that EPA should only finalize an approach that allows both oxygenate blenders and fuel and fuel additive manufacturers to be treated equally with regard to the availability of the 1-psi waiver.

Another commenter argued that EPA should not finalize an approach that provides E15 the 1-psi waiver for downstream blenders but excludes obligated parties (e.g., refiners and importers). Other commenters suggested that not allowing fuel and fuel additive manufacturers to utilize the 1-psi waiver by requiring them to meet the 9.0 psi RVP waiver condition is inappropriate because E15 is sub sim.

Response:

While we maintain our waiver applicability approach, we are also finalizing our interpretation that E15 is substantially similar to Tier 3 E10 certification fuel, and thus fuel and fuel additive

³⁶ See 75 FR 68,094, 68,146 (Nov. 4, 2010).

manufacturers, including refiners and importers, can also utilize the 1-psi waiver to introduce into commerce E15 at 10.0 psi RVP as a result of this action.

We also find that the text of the statute supports our finding that under the waiver applicability approach, fuel and fuel additive manufacturers are treated differently under the statute. More specifically, CAA sec. 211(f) refers to "manufacturers of fuel and fuel additives" and therefore, fuel and fuel additive manufacturers, as defined in our regulations at 40 CFR 79.2, are the parties to whom the waiver conditions under CAA sec. 211(f)(4) apply. Our regulations exclude from the definition of fuel manufacturers those parties, other than a refiner or importer, who add only oxygenates in otherwise allowable amounts. Therefore, our approach to treating fuel and fuel manufacturers different from downstream blenders such as oxygenate blenders is appropriate.

Comment:

One commenter argued that EPA cannot sequence its statutory authorities under the CAA in a way that allows downstream oxygenate blenders to blend E15 and take advantage of the 1-psi waiver.

Response:

In providing E15 the 1-psi waiver through our "waiver applicability approach" we are not "sequencing" our statutory authorities. The text of CAA sec. 211(f) only describes manufacturers of fuels and fuel additives and no other parties in the gasoline distribution chain while other paragraphs in CAA sec. 211 specifically name other parties in the gasoline distribution system. Of importance for this action, the "deemed to comply" provision at CAA sec. 211(h)(4), in fact, lists the following named parties: distributors, blenders, marketers, resellers, carriers, retailers, or wholesale purchaser-consumers (essentially all parties in the gasoline distribution chain except fuel and fuel additive manufacturers). As such, it has been our interpretation that CAA sec. 211(f) by its own terms applies only to fuel and fuel additive manufacturers. Any waiver conditions, such as the requirement that E15 must meet a 9.0 psi RVP standard, could only apply to fuel and fuel additive manufacturers under CAA sec. 211(f). Therefore, upon application of the 1-psi waiver under CAA sec. 211(h)(4), downstream parties, such as oxygenate blenders, who are not fuel or fuel additive manufacturers are not required to meet the 9.0 psi RVP waiver condition.

1.3.2 Sub Sim

1.3.2.1 General Comments on Sub Sim

Commenters that provided comment on this topic include but are not limited to: 0544, 0581, 0585, 0657, 0794, 0797, 0804, 0820, 0845, 0851, 0854, 0856, 0864, 0873, 0875, 0877, 0894, 0904, 0910, 0914, 0918, 0920.

Comment:

Some commenters strongly supported our finding that E15 was sub sim to Tier 3 E10 certification fuel. Many commenters stated this approach was appropriate because it provided the 1-psi waiver to all parties in the fuel distribution chain, including fuel and fuel additive manufacturers.

Response:

We are finalizing our interpretation that E15 is sub sim to Tier 3 E10 certification fuel.

Comment:

Commenters suggested that our approach to sub sim would limit innovation in the market for fuels. They point to language from *American Methyl* to support this argument. Another commenter stated that consumer acceptance and limit testing must also be taken into consideration. Other commenters asked that EPA consider a variety of other criteria when determining whether E15 is sub sim to Tier 3 E10 certification fuel (e.g., costs on distributing ethanol, localized air quality issues, the effects of ethanol use on food prices, etc.).

Response:

The purpose of CAA sec. 211(f)(1) is to protect the emissions control systems of motor vehicles, not to promote innovation or promote consumer acceptance in the market for fuels or fuel additives. As interpreted in this rulemaking, it is not necessary to consider criteria other than impacts on emissions control systems in motor vehicles when determining whether fuels or fuel additives are sub sim to certification fuels.

Comment:

One commenter suggested that while EPA cannot determine that E15 is sub sim to Tier 3 certification fuel, based on insufficient evidence, EPA can and should determine that marketplace E10 is sub sim to Tier 3 E10 certification fuel. A commenter stated that further testing is needed to substantiate a finding that E15 is sub sim. They suggested additional testing was necessary for all the criteria for a sub sim finding.

Response:

As discussed in Section II.C.6–8 of the final rule, based on a review of the available scientific literature and consistent with our engineering judgement, we find that E15 is sub sim to Tier 3 E10 certification fuel for MY2001 and newer light-duty vehicles (which includes Tier 3 vehicles).

1.3.2.2 Legal Comments on Interpretation of Sub Sim

Commenters that provided comment on this topic include but are not limited to: 0546, 0748, 0799, 0809, 0820, 0851, 0853, 0854, 0881, 0884, 0889, 0894, 0918.

Comment:

Commenters suggested that the new Tier 3 E10 certification fuel justifies a new sub sim interpretation.

Other commenters stated EPA did not provide a reasonable basis for changing its interpretation of substantially similar to determine that E15 is sub sim to Tier 3 E10 certification fuel.

Response:

The existence of a new certification fuel, Tier 3 E10 certification fuel, is an appropriate change in circumstances prompting a new sub sim definition and determination as discussed in Section II.C.3 of the final rule.

Comment:

Commenters suggested that EPA should retain its former approach to volatility for sub sim and only conclude that E15 need to meet a single volatility class under ASTM to be sub sim. Other commenters suggested that volatility is not properly considered under CAA sec. 211(f).

Finally, some commenters supported an assessment of E15 at 9.0 psi or E15 at 10.0 psi.

Response:

As described in Section II.C.5 of the final rule, we do not find that our former approach to volatility under sub sim is appropriate for the reasons put forth in that section.

Comment:

Commenters opposed EPA limiting its finding to only Tier 3 light-duty motor vehicles, further suggesting that EPA had no evidence to support such a limitation.

Response:

We are not limiting our finding to only Tier 3 light-duty motor vehicles; however, we are determining that E15 is only sub sim to Tier 3 E10 certification fuel when it is used in MY2001 and newer model year light-duty motor vehicles. See Section II.C of the final rule for more discussion.

Comment:

Commenters suggested that EPA's interpretation of CAA sec. 211(f)(1)(B) is flawed and must be read to be protective of all vehicles retrospectively as well as prospectively. It also must be read to only apply to fuels that are sub sim to all certification fuels, including prior certification fuels. Another commenter suggested that the proper reference fuel of comparison for vehicles that were certified on indolene is indolene (i.e., a certification fuel containing no ethanol), not E10. A commenter suggested that E15 is not sub sim to the original E0 cert fuel and that even MY2001–

2014 vehicles were not certified on a gasoline-ethanol blend and that testing of these vehicles on Tier 3 E10 certification fuel is unknown.

Other commenters suggested that EPA must not limit the applicability of sub sim determination to only Tier 3 light-duty motor vehicles. Commenters argue further that to not consider all light-duty vehicles undermines the purpose of CAA sec. 211(f)(1) in protecting emission controls in the national fleet of light-duty motor vehicles.

Still other commenters agreed with our assertion under CAA sec. 211(f)(1) that we need only demonstrate that E15 is sub sim to a single fuel utilized in certification, not all certification fuels required and used historically.

Some commenters suggested that a fuel must be sub sim for all vehicles, not a subset. If it is not sub sim for all vehicles, it cannot be sub sim. Commenters suggested that EPA should take a broad approach to sub sim and find that a fuel is sub sim only if it is sub sim to all the fuels utilized to certify Tier 2 and Tier 3 vehicles, i.e., indolene (E0) and E10.

Response:

The approach we have finalized is protective of all vehicles retrospectively as well as prospectively. All future vehicles will be certified on Tier 3 E10 certification fuel and we are limiting our sub sim determination only to those vehicles for which we have determined the use of E15 is appropriate (i.e., MY2001 and newer light-duty motor vehicles, consistent with our CAA sec. 211(f)(4) partial waivers for E15).

Further, we do not agree that in order to be sub sim, a fuel must be sub sim to all prior certification fuels, nor do we agree that it need to be sub sim when used in all vehicles and engines. CAA sec. 211(f)(1) does not speak to this point, and we find it is appropriate and protective of vehicles and engines to determine whether a fuel is sub sim as compared to a single certification fuel in this particular case because we have information on the use of E15 in all the gasoline-powered vehicles and engines, and can appropriately limit the use of E15 in the vehicles, engines and equipment for which the use would harm emissions systems.

We agree that E15 is not sub sim to indolene (i.e., certification fuel that contains no ethanol). As discussed in the Section II.C of the final rule, however, we believe that we can evaluate and issue a determination of E15 compared to Tier 3 E10 certification fuel because we have sufficient information about the use of E15 covering the entire scope of gasoline-fueled vehicles, engines, and equipment. This information informs our determination that E15 is sub sim to Tier 3 E10 certification fuel when used in MY2001 and newer light-duty vehicles as discussed in Section II.C.6-8 of the final rule.

CAA sec. 211(f)(1) is reasonably read to accommodate a substantially similar determination for a fuel or fuel additive to a single certification fuel. While the meaning of the word "any" has been found to be expansive in other contexts under the Clean Air Act, in section 211(f)(1), "any" is used in a different manner. See *New York v. EPA*, 443 F.3d 880, 885-86 (finding "any" to have an expansive meaning under CAA sec. 111 definition of "modification," but recognizing that "the meaning of 'any' can differ depending on the statutory setting[,]" particularly where such a

reading would have "strange and indeterminate results") (citations omitted). Thus, in CAA sec. 211(f)(1), the term "any certification fuel" must be read in its particular statutory setting. Here, Congress prohibited the introduction into commerce of "any" fuel or fuel additive which is not substantially similar to "any" fuel or fuel additive used in the certification of "any" model year 1975 or later vehicle or engine. Hence, we examine each use of the term "any" in its particular context within CAA sec. 211(f)(1).

CAA sec. 211(f)(1)(B) refers to "any fuel or fuel additives . . . for use by any person in motor vehicles" which is not sub sim "to any fuel or fuel additive utilized in the certification of any . . . vehicle or engine." In contrast, CAA sec. 211(f)(1)(A) provides essentially the same provision but limits the assessment to "any fuel or fuel additive for general use in light duty vehicles manufactured after model year 1974 which is not substantially similar to any fuel or fuel additive utilized in the certification of any model year 1975, or subsequent model year, light duty vehicle or engine. . .." The use of the term "any" in CAA sec. 211(f)(1) made sense at the time the provision was enacted—there was only a single certification fuel for light-duty vehicles, and thus, "any" could be read literally to mean "any" fuel for use in "any" light-duty vehicle needed be sub sim to "any" fuel utilized in the certification of "any" light-duty vehicle. There was a single fuel used in certification that was compatible with any light-duty vehicle. However, now that Congress expanded CAA sec. 211(f)(1)(B) to apply to all motor vehicles, the only logical reading of the term "any" is in the context of the motor vehicles and engines and fuels to which this provision applies. The use of the term "motor vehicles" expands the provision to apply more broadly to vehicles and engines certified on completely different fuel types.

We therefore read each of the terms in context. First, the prohibition on introduction into commerce applies to "any" fuel or fuel additive which is not sub sim, and this cannot mean that "all" fuels and fuel additives must be found to be sub sim before a single fuel or additive can be introduced into commerce. Rather, "any" here refers to "any single" fuel or additive. Similarly, we read the term "any" in the statutory phrase "any fuel or fuel additive utilized in the certification of any motor vehicle" again to refer to a particular fuel or fuel additive utilized in the certification of a particular subset of vehicles. This creates the point of reference for which other fuels are to be compared to determine whether they are "substantially similar." In this case, it is the use of E10 in gasoline-powered vehicles. This interpretation is logical, because, as articulated in Section II.C.3 of the final rule, "any" cannot possibly refer to any of the various fuels utilized in the certification of any vehicle or engine. Under a reading where "any" broadly refers to "any fuel utilized in certification," E15 would need to be sub sim to diesel fuel or E85, two fuels utilized in the certification of particular subsets of vehicles and engines (i.e., diesel powered vehicles and engines, and flex fuel vehicles). This outcome is nonsensical and is the kind of "strange and indeterminate" result that indicates a different meaning of "any" in this context. Finally, we read the term "any" in the statutory phrase "for use by any person in motor vehicles" to define the scope of our analysis, and we read this term broadly to encompass all of the motor vehicles, engines, and equipment which could use the fuel. We find that this interpretation harmonizes the statutory provisions in light of the expansion of CAA sec. 211(f) to all motor vehicles, and the existence of multiple certification fuels.

In addition, we also find that CAA sec. 211(f)(1)(B) allows EPA to compare a particular fuel to a new fuel utilized in the certification of light-duty motor vehicles such as Tier 3 E10 certification

fuel. In particular, CAA sec. 211(f)(1)(B) explicitly allows for EPA to determine a fuel is "substantially similar to any fuel or fuel additive utilized in the certification of any model year 1975, or subsequent model year, vehicle or engine under section 7525 of this title." It is therefore appropriate to issue a new sub sim definition as compared to a new certification fuel such as Tier 3 E10 certification fuel.

Comment:

Commenters suggested that our proposed rule is inconsistent with CAA sec. 211(f)(1). They argued that limiting the concentration of ethanol to no more than 15 percent is inappropriate. Commenters proposed an alternative reading of CAA sec. 211(f)(1) under which ethanol is a "fuel additive used in vehicle certification." They argued that because ethanol is a component of Tier 3 E10 certification fuel, it is an "additive utilized in the certification of" motor vehicles. They then argue that ethanol, as a fuel additive, must be sub sim at any concentration because it is chemically identical to a fuel additive – ethanol – used in certification. They argue EPA is ignoring the term "fuel additive" in CAA sec. 211(f)(1). Commenters also suggested that EPA is ignoring to the phrase "increasing its concentration in use."

Commenters pointed to the "distributive canon" of statutory interpretation and argued that the phrase "concentration in use of" must relate to "fuel additive," and that EPA is reading "concentration in use of" to apply to the concentration of ethanol in gasoline.

Commenters also pointed to the existence of CAA sec. 211(f)(2) as further support for their argument, contending that this provision is controlling the concentration of a fuel additive.

Commenters suggest there are no concerns with increasing concentrations of "fuel additives" in fuel when those fuel additives are used in certification because EPA has broad authority "prescribe specifications for the certification fuel."

Commenters pointed to the existence of CAA sec. 211(c) in support of their argument that the concentration of ethanol cannot be controlled; they argue that CAA secs. 211(a) and (c) are the only mechanisms for EPA to limit the concentration. They suggest that fuel and fuel additive manufacturers can only introduce into commerce after satisfying the registration emissions and health effects testings requirements under CAA sec. 211(a) and that EPA can exercise its authority under CAA sec. 211(c) to place limits on use or concentration. Some parties suggested that control under CAA sec. 211(c) is the only appropriate mechanism because it "place[s] the burden on EPA to justify the imposition of a control or prohibition on a fuel or fuel additive that is "substantially similar" to a certification test fuel."

Commenters also argued that fuel additives used to certify vehicles are not limited in any way by CAA sec. 211(f)(1) and that manufacturers may increase their concentration unless otherwise prohibited. Commenters suggested that such limits on concentration should be limited to

A subset of commenters suggested that once ethanol, as a fuel additive, is present in certification fuel, "the legal burden of proof is on EPA to provide mid-level ethanol blends (E20-40) damage emissions control systems or exacerbate tailpipe emissions."

Some commenters also suggested that EPA was using CAA sec. 211(f)(1) as "the primary mechanism for regulating and restricting ethanol fuel blends." Commenters suggested that CAA sec. 211(f) creates a presumption that, once a fuel additive, such as ethanol is present in a certification fuel unless EPA acts under 211(c).

Commenters suggested that EPA was "repurposing" the sub sim mechanism to regulate and restrict ethanol fuel blends. Commenters also suggested that EPA should bear the burden of justifying "continuing past obsolete restrictions on the use of mid-level ethanol blends under the more scrutinizing standard of 211(c)."

Response:

We disagree with commenters' reading of the statute for several reasons. First, fuels and fuel additives are separate subjects, each of which is addressed under CAA sec. 211(f)(1). E10 and E15 are fuels and we do not treat the various components of those fuels as "fuel additives."

We are not, as commenters contend, reading out the statutory language with respect to fuel additives, we simply find that in this case, ethanol is not appropriately considered a fuel additive. The reference to "fuel additive" and "increasing concentration in use" are still relevant to a sub sim assessment for a fuel additive. While "fuel additive," as defined under our 40 CFR part 79 regulations would encompass ethanol, we do not find that ethanol is properly treated as a fuel additive under CAA sec. 211(f)(1). Commenters' reading of the statute would run counter to the stated Congressional purpose in enacting CAA sec. 211(f) – to protect emissions systems from harm due to the unrestricted use of fuel or fuel additives. The legislative history for 211(f)(1) indicates that it was enacted in order to protect emissions systems from harm due to fuel or fuel additives for which the time to promulgate a CAA sec. 211(c) rulemaking would be too lengthy. Therefore, it would be inconsistent with the statutory purpose of CAA sec. 211(f) to only restrict the concentration of fuel additives under CAA sec. 211(c). See further discussion in Section II.A.1 of the final rule.

We also disagree with commenters' suggestion that CAA sec. 211(f)(1) should be read to allow "increas[ing] the concentration in use of" any fuel additive that is substantially similar to a fuel additive utilized in certification. We think this is the opposite of what was intended by the sub sim provision. Because additives can have different effects at different concentrations, CAA sec. 211(f)(1) could not possibly allow unlimited increasing concentrations for any fuel additive that is sub sim to one utilized in certification.³⁷ We also do not find that our argument treats ethanol unfairly – we have never found that a fuel additive utilized in the certification of motor vehicles can be used at any concentration, but have always specified permitted levels. See, e.g., the 2008

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³⁷ Gasoline is comprised of hundreds of hydrocarbon compounds with widely different fuel properties that together produce a fuel with the appropriate properties for combustion in gasoline engines. Some of these compounds, such as butane, are gaseous at room temperature were they not disolved in gasoline. Other compounds such a napthalene are very low volatility compounds that by themselves would not ignite in a gasoline engine. Ethanol by itself has a low volatility as well. Gasoline with high concentrations of these and many other compounds in gasoline would not allow gasoline vehicles and engines to function. To function appropriately in gasoline engines, gasoline needs to be comprised of a broad range of fuel components that together produce a blend with the properties needed for proper combustion. Allowing gasoline to have any combination of the fuel compounds found in gasoline could not have been the Congressional intent of 211(f).

sub sim interpretative rule, where we found fuel additives are only sub sim at a concentration of no more than 0.25 percent by weight.³⁸ We think the best reading of the statute as it pertains to fuel additives to be that fuel and fuel additive manufacturers are prohibited from introducing into commerce a fuel additive, or increasing its concentration in use, unless it is substantially similar, in both physical and chemical characteristics and concentration. Although commenters suggest that the reference to "increasing concentration in use" applies for fuel additives that are not substantially similar, but have already been introduced into commerce, this cannot be the meaning of the statute. A fuel additive cannot be present in the fuel unless it is sub sim, and if it is not present in the fuel, its concentration cannot be increased. Commenters' reading would read out the phrase "increasing concentration in use" by permitting a sub sim fuel additive to be used at any concentration, regardless of the concentration at which EPA finds the additive to be sub sim. There may be fuel additives that have been granted a waiver from sub sim for which the concentration could be increased, but we believe the best reading of the statute limits the concentration of both fuel additives that are sub sim and those that have received a waiver. It would be inappropriate for fuel additives for which we have granted CAA sec. 211(f)(4) waivers to be introduced at any concentration – these fuel additives are similarly limited in concentration under CAA sec. 211(f)(4) waiver conditions. Additionally, CAA sec. 211(f)(4) already allows for limits on the concentration of fuel additives that are not sub sim. (allowing for a waiver for "a fuel additive or a specified concentration thereof"). Commenters' argument would make the language in CAA sec. 211(f)(4) superfluous. The impacts of fuel additives on fuel vary significantly depending on concentration. It would be inappropriate for EPA to allow ethanol at any concentration.

Commenters' arguments about the distributive canon are also misplaced. EPA is not reading "concentration in use" to limit the concentration of ethanol in fuel. EPA is limiting the concentration of ethanol in fuel when evaluating a specific fuel type with a specific ethanol concentration; this limitation is appropriate based on the information we have before us about E15 as a fuel. The ethanol content is limited as a fuel property, not as an additive. CAA sec. 211(f)(2), which commenters point to as evidence of Congress knowing how to limit the concentration of an additive used in certification fuel, does not support commenters' argument. CAA sec. 211(f)(2) refers to "gasoline which contains a concentration of manganese in excess of .0625 grams per gallon." There, the statute refers to manganese not as an additive, but a component of fuel; the additive would be methylcyclopentadienyl manganese tricarbonyl (MMT), but yet the statute refers to manganese, not the additive itself.

Commenters' arguments about EPA's broad authority to prescribe specifications for certification fuel is also misplaced, because under their argument, EPA could only limit the concentration of fuel additives by not allowing the fuel additive in certification fuel at all. This would be inappropriate as the effects of fuel additives are directly impacted by their concentration. Vehicle manufacturers are given flexibility in the fuels on which they can certify their vehicles, and thus EPA has limited authority to limit fuels utilized in certification beyond the certification fuels specified in our testing procedures in 40 CFR part 86.

Regarding commenters' suggestion that once a fuel additive is used in certification, EPA bears the burden of demonstrating that it harms emissions systems or increases emissions under CAA

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³⁸ See 73 FR 22281 (April 25, 2008).

sec. 211(c) in order to limit the concentration of a fuel or fuel additive, we disagree. Emissions impacts are squarely within the scope of analysis under CAA sec. 211(f) and it would be inappropriate to allow the use of gasoline-ethanol blends in vehicles without evaluating the impacts on control systems or tailpipe emissions under CAA sec. 211(f).

See also our discussion about whether gasoline-ethanol blends higher than 15 percent ethanol are sub sim in Section 1.3.2.1 of this document.

Comment:

Commenters suggested limiting our sub sim finding to E15 only is contrary to congressional intent, citing that Congress did not intend to place an upper limit on ethanol content by citing to CAA secs. 202(1) and 211(o) as evidence of congressional intent.

Response:

While legislative history associated with CAA sec. 211(o) may discuss ethanol use in fuel, and ethanol may be an octane replacement for aromatics, enacting CAA secs. 202(l) and (o) has little to do with the meaning of CAA sec. 211(f) and any congressional intent in those actions does not impact the text or purpose of CAA sec. 211(f). As a general matter, views expressed in subsequent Congressional sessions³⁹ are of limited persuasive authority in statutory interpretation (Statements made in subsequent Congressional session are a "hazardous basis for inferring the intent of an earlier one." *U.S. v. Price*, 361 U.S. 304, 313 (1960)). And as described in Section II.A.1 of the final rule, CAA sec. 211(f) was enacted to be protective of emissions systems without any special treatment or preference for gasoline-ethanol blends or even any mention of ethanol.

Comment:

Commenters suggested that EPA should find that gasoline-ethanol blends other than E15, or a gasoline-isobutanol blend up to 16 volume percent (Bu16) is substantially similar to Tier 3 E10 Certification fuel.

Response:

In this action, we are acting in response to an October 11, 2018, White House statement directing EPA to initiate a rulemaking to consider expanding RVP waivers for fuel blends containing gasoline and up to 15 percent ethanol. Our actions are in furtherance of that goal to provide E15 and solely E15 with the 1-psi waiver. As discussed in the final rule, in order to accomplish that goal, we are taking several steps to modify the summer volatility requirements for E15, including addressing the volatility limit imposed by the CAA sec. 211(f)(4) waiver for E15 through a finding that E15 is sub sim to Tier 3 E10 certification fuel.

This action is limited to providing E15 the 1-psi waiver, and therefore any comments regarding whether other gasoline-ethanol blends, other than E15, or any other fuels and fuel additives, such as Bu16, are substantially similar to Tier 3 E10 certification fuel are outside the scope of this action.

³⁹ CAA sec. 202(l) was enacted in the Clean Air Act Amendments of 1990, and CAA sec. 211(o) was enacted in Energy Policy Act in 2005 and later modified in Energy Independence and Security Act in 2007.

Comment:

Commenters stated that the approach we are taking places "outdated and unsupported limitations on E15," "the burden on ethanol producers to justify expanded use of sub sim ethanol blends beyond E15," and "limit[s] the broader use and availability of ethanol, contrary to Congressional intent."

Response:

Limitations on E15 are discussed in Section 1.3.2.6 of this document. As discussed in the previous response, we are treating as beyond the scope any comments regarding whether other gasoline-ethanol blends are sub sim. Finally, we discuss Congressional intent with regard to ethanol in Section 1.2.2.1 of this document and elsewhere in this section.

Comment:

Commenters stated that the scope of vehicles and engines to be considered is narrower under CAA sec. 211(f)(1) than CAA sec. 211(f)(4).

Response:

We disagree with commenters that the scope of vehicles and engines to be considered is narrower under CAA sec. 211(f)(1) than CAA sec. 211(f)(4). CAA sec. 211(f)(4) is a waiver from CAA sec. 211(f)(1) and should not be read to be more restrictive than CAA sec. 211(f)(1). In this action we read CAA sec. 211(f)(1) to be as broad as CAA sec. 211(f)(4) as discussed in Section II.C of the final rule.

CAA sec. 211(f) provides for a prohibition of introduction into commerce by fuel and fuel additive manufacturers of fuels and fuel additives that are not "substantially similar" to a fuel utilized in the certification of motor vehicles. CAA sec. 211(f)(4) provides a waiver from that prohibitions for fuels that are not "substantially similar," but nonetheless can be shown to not cause or contribute to the failure of any emission control device or system over the useful life of the vehicle or engine. CAA sec. 211(f)(4) was amended in the Energy Security and Independence Act ("EISA") in 2007, to expand the analysis required under CAA sec. 211(f)(4) to require a demonstration that fuel or fuel additive would not cause or contribute to the failure of any emission control device or system over the useful life of the "motor vehicle, motor vehicle engine, nonroad engine, or nonroad vehicle." We find that this amended formulation of CAA sec. 211(f)(4) also informs our assessment under CAA sec. 211(f)(1), especially in the case of E15, where we have the benefit of the full CAA sec. 211(f)(4) analysis to inform our sub sim finding as compared to Tier 3 E10 certification fuel. We read CAA secs. 211(f)(1) and (f)(4) in a way that harmonizes the two provisions in this situation, where it is reasonable to address impacts on emissions control devices and systems for the same broad range of vehicles under a sub sim determination.

1.3.2.3 Exhaust Emissions

Commenters that provided comment on this topic include but are not limited to: 0534, 0544, 0611, 0768, 0794, 0798, 0799, 0809, 0820, 0841, 0854, 0864, 0875, 0878, 0879, 0889, 0904, 0913, 0914, 0917.

Comment:

Commenters agreed with EPA's assessment that there would be no adverse emissions impacts of E15 when compared to Tier 3 E10 certification fuel. Commenters highlight the DOE catalyst durability study⁴⁰ and the recent UC Riverside studies.⁴¹

Another commenter argued that EPA omitted studies showing that the organics emitted from a tailpipe will have a lower ozone-forming potential with E15 in comparison to E10. The commenter noted further that the UC Riverside study evaluated emissions from two 2012 model year vehicles and found that the ozone reactivity for emissions from E15 was in fact less than those for E10.⁴² The commenter also noted that the Coordinating Research Council (CRC) conducted a study on flex fuel vehicle emissions from E6, E32, E59, and E85 fuels and found that the average ozone-forming potential decreased with increasing ethanol content of the fuels on the cold start test procedure, though the results were mixed on the US06 and Unified Cycle tests. The commenter noted that other researchers found a slight improvement in ozone-forming potential calculated from Maximum Incremental Reactivity values when E10 was compared to E0 in a European certified vehicle.⁴³ Taken together, these results suggest that there will be no increase in ozone-forming potential with higher ethanol content fuel.

Response:

While the scale of the studies cited by commenters is too small to draw definitive conclusions, the results of these studies are consistent with our determination that E15 is sub sim to Tier 3 E10 certification fuel when used in MY2001 and newer light-duty motor vehicles. Of note, studies conducted on flex-fueled vehicles (FFVs), while potentially informative, do not specifically address emissions effects of E15 in gasoline-fueled MY2001 and newer light-duty motor vehicles as FFVs are designed to operate on a range of gasoline-ethanol blends up to 83 volume percent ethanol. Studies conducted on European certified vehicles similarly do not specifically address emissions effects of E15 in U.S. certified light-duty motor vehicles.

⁴⁰ See Brian West et al., "Intermediate Ethanol Blends Catalyst Durability Program," Feb. 2012, ORNL/TM-2011/234.

⁴¹ See Georgios Karavalakis et al., "Evaluating the regulated emissions, air toxics, ultrafine particles, and black carbon from SI-PFI and SI-DI vehicles operating on different ethanol and iso-butanol blends," 2014; and Georgios Karavalakis et al., "Impacts of Aromatics and Ethanol Content on Exhaust Emissions from Gasoline Direct Injection (GDI) Vehicles," Apr. 2018.

⁴³ See Xin Wang et al., "Estimating Ozone Potential of Pipe-out Emissions from euro-3 to euro-5 Passenger cars Fueled with gasoline, Alcohol-Gasoline, Methanol and Compressed Natural Gas," April 2016, SAE 2010-01-1009.

Comment:

Commenters noted that E15 would result in decreased fuel economy relative to E10 or E0 which would result in increased exhaust emissions and poorer air quality. Commenters argue that this is due to the decreased energy content of ethanol relative to gasoline.

Response:

E15 fuel contains about 1.6 percent less energy per gallon than E10, but this doesn't necessarily mean it will produce more emissions that harm air quality. The emissions measurements are taken on a grams per mile basis, not a grams per gallon basis. As a result, the projected emission impacts for E15 relative to E10 already capture changes in fuel economy related to the energy content of the fuel in the assessment provided in Sections II.C and II.F of the final rule.

Comment:

Commenters noted that E15 causes issues with exhaust emissions for nonroad products. Commenters note that the additional oxygen content of higher gasoline-ethanol blend fuels produces a significant increase in engine temperatures that results in increased engine wear and ultimately engine failure.

Response:

There is evidence of higher exhaust temperatures with gasoline-ethanol blends in nonroad engines that have no feedback control for air/fuel ratio. These higher temperatures could contribute to premature wear and failure. However, current regulations prohibit E15 use in nonroad engines, and the extension of the 1-psi RVP waiver to E15 will not change this prohibition. E15 use is only allowed in 2001 and later model year light-duty vehicles and trucks, regardless of the seasonal RVP waiver. As discussed in Section II.C.8 of the final rule, we have also determined that E15 is not sub sim to Tier 3 E10 certification fuel when used in nonroad products.

Comment:

Commenters agreed that any tailpipe emissions differences between E15 and E10 were "at most slight." However, they critiqued our use of statistical models based on match-blended fuels and that there was a question about whether the impacts could be attributable to ethanol when other studies have not demonstrated an impact. They also highlighted CO and benzene emissions benefits due to lower aromatic content. Commenters also critiqued our failure to include other studies that show that ethanol's effects on criteria pollutants were beneficial.

Response:

We have responded to criticisms of our use of match blending study results in the literature and in a 2018 response to a request for correction. 44,45 We continue to find, based on the body of test data and literature discussed in Sections II.C and II.F of the final rule, that the addition of ethanol

⁴⁴ Butler, A., Sobotowski, R., Hoffman, G., and Machiele, P., "Influence of Fuel PM Index and Ethanol Content on Particulate Emissions from Light-Duty Gasoline Vehicles," SAE Technical Paper 2015-01-1072, 2015, doi:10.4271/2015-01-1072.

⁴⁵ See EPA's response to a Request for Correction of Information related to the MOVES model and the EPAct/V2/E-89 light-duty vehicle emissions study, filed August 31, 2018. Document available at https://www.epa.gov/quality/epa-response-rfc-17001.

slightly increases emissions of several key pollutants, while at the same time slightly decreasing others. However, in finding the emission differences between E15 and E10 slight, both any potential benefits and dis-benefits, this supports our determination that E15 would be sub sim to Tier 3 E10 certification fuel when used in MY2001 and newer light-duty motor vehicles.

Comment:

Commenter argued that the key data EPA used to determine that E15 was sub sim to Tier 3 E10 certification fuel in Tier 3 light-duty motor vehicles was done on Tier 2 light-duty motor vehicles. Commenters argue that the studies cited by EPA in the NPRM indicate that Tier 3 vehicles may be more sensitive to ethanol content in terms of their expected PM emissions performance, with perhaps 10 percent higher PM emissions on E15 relative to E10 in gasoline-direct-injected vehicles. Commenters suggested that this increase would cause vehicles to exceed relevant emissions standards when operated on E15, and EPA offers no supporting data to indicate that this would not cause exceedances in the Tier 3 light-duty motor vehicle fleet.

Response:

There are studies showing both PM increases and decreases with ethanol blending in the range of E10 to E15. This disagreement likely stems from differences between studies in the level and behavior of other fuel properties, such as aromatics content and T50, as well as the particular test vehicles that were used. As discussed in Sections II.C and II.F of the final rule, our best assessment of fleetwide impacts on PM for Tier 2 vehicles would be approximately a 4 percent increase, with more recent gasoline direct injection vehicles more typical of Tier 3 vehicles exhibiting a PM increase of perhaps has high as 10 percent. There is no evidence these impacts will cause vehicles to exceed their certified emissions standards in-use.

Comment:

One commenter argued that E15 increases PM, NO_x, and NMOG emissions relative to both E0 and E10 and that this alone is enough to determine that E15 is not sub sim to indolene or Tier 3 E10 certification fuel.

Response:

We are not addressing in this action whether E15 is sub sim to E0. Concerning NO_x , the effect of oxygen content on NO_x is well known, as it was in 1981, 1991, and 2008 when we determined that levels of oxygen up to 2.0 weight percent and then 2.7 weight percent were sub sim to E0. Vehicles at the time of the prior sub sim determinations were much more sensitive to the effects of increased oxygen content since they lacked adaptive fuel controls to compensate for oxygen levels in the fuel. This resulted in higher absolute and relative NO_x emissions than we would expect to see when comparing E15 to E10. Since we are not finding that E15 is sub sim to E15 for these older vehicles (i.e., we are limiting our determination to only those vehicles that typically possess adaptive fuel controls to adjust to the higher levels of oxygen in E15 relative to E10), we expect that the effects on NO_x would be similar for E15 as E10 on MY2001 and newer light-duty motor vehicles.

Comment:

One commenter argued that E15 would cause an increase in emissions and a potential failure of emissions control equipment in MY2000 and older light-duty motor vehicles.

Response:

Such potential emission impacts of E15 are part of the very basis for our determination as discussed in Section II.C.8 of the final rule that E15 is not sub sim to Tier 3 E10 certification fuel when used in products other than MY2001 and later light-duty vehicles and truck. We believe the prohibitions on E15 use in such products, as well as the misfueling mitigation measures in place adequately address these concerns.

Comment:

One commenter argued that CRC conducted an extensive program to evaluate the long-term emissions control durability and driveability performance and equipment compatibility of a range of light-duty vehicle models which found significant exhaust and evaporative emissions and performance impacts of both older and newer light-duty vehicles when operating on fuels containing greater than 10 percent ethanol by volume.

Response:

As discussed in Section II.C of the final rule, we continue to find, based on the body of test data and literature, including the results of the CRC program referenced, that while E15 may increase emissions of several key pollutants, the increases are not sufficient to conclude that E15 is not sub sim to Tier 3 E10 certification fuel in Tier 3 vehicles.

Comment:

One commenter highlighted ethanol use in Brazil and suggests that lead to lower CO, PM, and toxics emissions that improved air quality in Brazil.

Another commenter suggested that EPA ignore alternative methodologies to evaluate E15's effects on exhaust emissions and air quality, and that EPA should take Sao Paulo's experience with E20/E25, and its effects on air quality, as a cautionary tale of how a 5 percentage point increase can adversely affect air quality.

Response:

We appreciate the comparisons to Brazil. However, the conditions are considerably different in Sao Paulo and other parts of Brazil than in the U.S. Based on our assessment of the available information as described in Sections II.C and II.F of the final rule, we conclude that the impacts of E15 relative to E10 in the U.S. will be minor even should the use of E15 increase significantly.

1.3.2.4 Evaporative Emissions

Commenters that provided comment on this topic include but are not limited to: 0534, 0547, 0671, 0730, 0799, 0809, 0820, 0864, 0889, 0913.

Comment:

Some commenters suggested that EPA should compare E15 at 10.0 psi to E10 at 9.0 psi and find that E15 at 10.0 psi is sub sim due to the similar impacts on emissions, materials compatibility, and driveability. Commenters often pointed to EPA's prior approach to volatility for sub sim where the fuel need only meet the volatility class for a single ASTM seasonal and geographic standard.

Other commenters suggest that by comparing E15 at 10.0 psi RVP to E10 at 9.0 psi RVP, EPA is ignoring the specific emissions increases and damage to emission controls resulting from the increase of 1.0 psi RVP. They argue that EPA's analysis for evaporative emissions is insufficient to determine that E15 is sub sim to Tier 3 E10 certification fuel.

Other commenters suggested that the appropriate comparison is between E15 at 9 psi and E10 and 9 psi.

Response:

As discussed in Section II.C.5 of the final rule, to assess whether E15 is sub sim to Tier 3 E10 certification fuel, we have compared E15 at 9 psi to E10 Tier 3 E10 certification fuel at 9 psi. In this action we are reinterpreting CAA sec. 211(h)(4) as then extending the 1-psi RVP waiver to E15. We are not ignoring the impacts of volatility on emissions, but rather deferring to the direction of Congress to provide certain gasoline-ethanol blends a 1-psi waiver from volatility controls. The negative impacts of higher gasoline volatility on vehicle emissions, and thus air quality, were well known at the time that EPA and then Congress provided gasoline-ethanol blends with the 1-psi RVP waiver.

1.3.2.5 Materials Compatibility

Commenters that provided comment on this topic include but are not limited to: 0534, 0798, 0820, 0854, 0864, 0889, 0913.

Comment:

Commenters agree with EPA's conclusion that there should not be issues associated with materials compatibility for E15 used in Tier 3 certified vehicles as those vehicles are aged on E15 for evaporative emissions durability. Other commenters noted that EPA addressed the issue of materials compatibility in the E15 partial waivers and found that MY2001 and newer light-duty motor vehicles would not be expected to have any issues with materials compatibility.

Response:

We agree with these comments and discuss this specifically in Section II.C.6 and II.C.7 of the final rule.

Comment:

Some commenters suggested that ethanol can cause metal corrosion and break down certain plastics and rubbers in automobiles or nonroad products that were not constructed with materials compatible with ethanol exposure.

Response:

Such potential emission impacts of E15 are part of the very basis for our determination as discussed in Sections II.C.6 and II.C.7 of the final rule that E15 is not sub sim to Tier 3 E10 certification fuel when used in products other than MY2001 and later light-duty vehicles. We believe the prohibitions on E15 use in such products, as well as the misfueling mitigation measures in place adequately address these concerns.

1.3.2.6 Driveability

Commenters that provided comment on this topic include but are not limited to: 0534, 0757, 0798, 0820, 0854, 0864, 0889, 0913.

Comment:

Commenters support that there should not be issues associated with driveability for E15 used in Tier 3 certified vehicles as those vehicles are aged on E15 for evaporative emissions durability. Other commenter noted that EPA addressed the issue of driveability in the E15 partial waivers and found that MY2001 and newer light-duty motor vehicles would not be expected to have any issues with driveability.

Response:

We agree with these comments and discuss this specifically in Sections II.C.6 and II.C.7 of the final rule.

Comment:

Commenters argue that E15 will result in operability issues in nonroad engines and that the increased oxygen level from E15 will result in enleanment and increased exhaust temperatures in nonroad products that can ultimately lead to engine damage

Response:

Such potential emission impacts of E15 are part of the very basis for our determination as discussed in Section II.C.8 that E15 is not sub sim to Tier 3 E10 certification fuel when used in products other than MY2001 and later light-duty vehicles. We believe the prohibitions on E15 use in such products, as well as the misfueling mitigation measures in place adequately address these concerns.

Comment:

One commenter argued that EPA may interpret sub sim to require conformity with industry established quality standards, so long as those standards are related to certification fuel, and to the emissions performance of vehicles or engines, consistent with CAA sec. 211(f). Commenter argued that EPA has no authority to regulate fuel to ensure optimal driveability, and that EPA has no authority to substitute its judgment of the judgment of the states and consensus-driven private organizations that regulate fuel performance characteristics.

Response:

We disagree that EPA has no authority to regulate fuel to ensure optimal driveability. We also maintain that driveability is an important component to evaluating whether new fuels or fuel additives are sub sim under CAA sec. 211(f)(1). As we explain in the NPRM and in Section II.C of the preamble to the final rule, driveability is one of three main areas that EPA considers when determining whether a fuel is substantially similar under CAA sec. 211(f)(1). Issues with driveability arising from the use of a new fuel or fuel additive can result in the tampering or removal of emissions controls. Therefore, consideration of driveability ensures that EPA is preventing against the kinds of problems that the CAA sec. 211(f)(1) prohibition against introduction into commerce was designed to prevent. We also disagree that EPA lacks authority

to regulate fuel performance characteristics. CAA sec. 211(c) vests EPA with considerable authority to regulate the characteristics of fuel introduced into commerce, and EPA has regulated fuels pursuant to its CAA sec. 211(c) authority for decades.

1.3.2.7 Other Aspects of the Proposed Interpretative Rulemaking

Commenters that provided comment on this topic include but are not limited to: 0809.

Comment:

One commenter noted that as a result of determining that E15 is sub sim would remove the waiver conditions of the E15 partial waiver under CAA sec. 211(f)(1), which would undermine the intent of CAA sec. 211(f)(1). Therefore, EPA cannot find that E15 is sub sim.

Response:

In finalizing E15 as sub sim to Tier 3 E10 certification fuel, we have put in place criteria on the interpretation that mirror the waiver conditions of the E15 CAA sec. 211(f)(4) partial waivers. Additionally, we are still allowing parties to introduce E15 into commerce under the existing CAA sec. 211(f)(4) waiver should they choose to do so.

1.3.2.8 Sub Sim Limitations

Commenters that provided comment on this topic include but are not limited to: 0544, 0546, 0748, 0809, 0820, 0854, 0873, 0877, 0879, 0884, 0889, 0890, 0895, 0904, 0913, 0914, 0918, 0920.

Comment:

A number of commenters agree that EPA has discretion to define the scope of its sub sim analysis when determining whether one fuel sub sim to another, so long as the Agency adopts a reasonable interpretation. Several commenters agreed that the Agency may take real world conditions and limitations into consideration when making a sub sim determination. The commenters supported the idea that EPA may conclude that E15 is sub sim when used in appropriate vehicles by taking into account emissions, materials compatibility, and driveability impacts of E15 use.

Several commenters argued that EPA should not impose any conditions under CAA sec. 211(f)(1) for a fuel that is found to be substantially similar. Several commenters argued that CAA sec. 211(f)(1) is not dependent on the particular class of vehicles that use the certification fuel, and that the provision categorically exempts manufacturers from the CAA sec. 211(f)(1) prohibition against introduction into commerce if a fuel is sub sim to any fuel or fuel additive used in certification.

Response:

As we explain in Section II.C.9 to the preamble of the final rule, the text of CAA sec. 211(f)(1) does not directly address whether and how EPA can restrict a substantially similar determination. When the provision was first enacted in 1977, there was only one certification fuel—indolene (or "E0"). As explained in Section II.A.1 of the preamble to the final rule, Congress intended for CAA sec. 211(f)(1) to prevent the use of any new or recently introduced additive to unleaded gasoline that could impair the emission performance of vehicles. See S. Rep. No. 95-127, 95th Cong. 1st Sess. 90 (1977). However, since the enactment of CAA sec. 211(f)(1) in 1977, multiple fuels—including Tier 3 E10 certification fuel—have been used in the certification of vehicles and engines.

Given the fact that there are now multiple certification fuels, we believe it is reasonable to interpret CAA sec. 211(f)(1) as providing EPA with the authority to make a sub sim determination with respect to the use of the new fuel within certain parameters, where those parameters are designed to prevent against the kinds of problems that the CAA sec. 211(f)(1) prohibition against introduction into commerce is designed to prevent.

As discussed in Section 1.3.2.2, we disagree with commenters who suggest that CAA sec. 211(f)(1) categorically exempts manufacturers from the CAA sec. 211(f)(1) prohibition against introduction into commerce if a fuel is sub sim to <u>any</u> fuel or fuel additive used in certification. We disagree that EPA lacks the authority to place limitations on our sub sim determination with respect to particular vehicles. As discussed in Section II.C.9 of the final rule, we interpret CAA sec. 211(f)(1) as providing EPA with the authority to make a sub sim determination subject to appropriate parameters.

Comment:

A number of commenters agree that the agency need not demonstrate that E15 is sub sim for all vehicles and engines and that it may reasonably conclude that E15 is sub sim for use a portion of the fleet, specifically for MY2001 and later light-duty vehicles.

Several commenters argue that E15 is not substantially similar to E10 because E15 cannot be used safely in certain categories of vehicles, engines, and equipment, including MY2000 and older light-duty vehicles, heavy-duty vehicles, motorcycles, and non-road engines. One commenter argued that the Clean Air Act unequivocally precludes a sub sim determination where a significant portion of the vehicle fleet cannot use the purportedly substantially similar fuel. One commenter argued that EPA's sub sim interpretation risks undermining CAA sec. 211(f)(1) by subdividing the fleet. Commenters argued that EPA cannot determine that E15 is substantially similar to E10 because the fuels are dissimilar in multiple respects.

Response:

Our sub sim determination for E15 is based on a determination that E15 is sub sim to E10 Tier 3 certification fuel—a fuel that is used in the certification of only a subset of the vehicle fleet—when used in MY2001 and newer light-duty motor vehicles. We believe it is reasonable to limit our sub sim finding for E15 to MY2001 and newer light-duty vehicles because we find that E15 would have similar effects on emissions, materials compatibility, and driveability when compared to Tier 3 E10 certification fuel when used in this subset of vehicles.

We disagree with commenters who suggest that CAA sec. 211(f)(1) unequivocally precludes such a determination merely because E15 cannot be used in certain vehicles, engines, and equipment. We are determining that E15 is substantially similar to Tier 3 E10 certification fuels only for those vehicles and engines in which E15 is demonstrated to have similar effects on emissions, materials compatibility, and driveability when compared to Tier 3 E10 certification fuel.

Given the fact that there are now multiple certification fuels, we believe it is reasonable to interpret CAA sec. 211(f)(1) as providing EPA with the authority to make a sub sim determination with respect to the use of the new fuel within certain parameters, where those parameters are designed to prevent against the kinds of problems that the CAA sec. 211(f)(1) prohibition against introduction into commerce is designed to prevent. In fact, without the application of these parameters to the E15 sub sim determination, we do not believe there would be a substantive basis to find that E15 is sub sim to E10 certification fuel.

In making this sub sim determination for E15, we considered the emissions, materials compatibility, and driveability impacts of E15 use in all in-use vehicles and engines. As discussed in Sections II.C.6–8 of the final rule, we analyzed the use of E15 in the following vehicles and classes: MY2020 and newer light-duty motor vehicles (i.e., Tier 3 vehicles); MY2001–2019 light-duty motor vehicles; MY2000 and older motor vehicles; heavy-duty gasoline-fueled motor vehicles; and nonroad vehicles, engines, and equipment (including motorcycles and marine engines). After analyzing these vehicles and classes, we them limited our sub sim finding to those vehicles and engines for which we determined the use of E15 would be substantially similar to Tier 3 E10 certification fuel when used in those vehicles considering

emissions, materials compatibility, and driveability impacts, as explained in Section II.C of the final rule. As we also explain in the final rule, we are not making this determination for MY2000 and older light-duty vehicles nor are we making this determination for any model year heavy-duty gasoline engines or vehicles, on and off-highway motorcycles, or nonroad engines, vehicles, or equipment because we have determined that E15 is not substantially similar to E10 Tier 3 certification fuel when considering the emissions, materials compatibility, and driveability impacts of E15 use in these vehicles, engines, and equipment. We believe our sub sim finding is consistent with the intent of CAA sec. 211(f)(1) and that subdividing the fleet for purpose of analyzing whether a fuel is substantially similar under CAA Sec. 211(f)(1) is reasonable in light of the multiple certification fuels currently in use.

Comment:

A number of commenters opposed the concept of EPA limiting its sub sim determination for E15 to only those vehicles and engines certified using Tier 3 E10 certification fuel or to restricting the use of E15 to a narrower set of vehicles than those covered by the CAA sec. 211(f)(4) partial waivers granted to E15. Several commenters argued that EPA has no technical basis for limiting E15 to only Tier 3 vehicles. Commenters noted that, in the CAA sec. 211(f)(4) partial waivers for E15, EPA already determined that E15 is suitable for use in MY2001 and newer light-duty vehicles. Commenters argued that EPA has no basis for concluding that the additional ethanol content in E15 would have a functionally different impact on exhaust emissions, materials compatibility, or driveability when used in MY2001 and later vehicles as compared to Tier 3 vehicles.

Response:

We are not restricting our sub sim finding for E15 to only those vehicles and engines certified using Tier 3 E10 certification fuel. Instead, we are setting parameters that limit our sub sim finding to those vehicles and engines for which E15 has similar impacts on emissions, materials compatibility, and driveability when compared to Tier 3 E10 certification fuel. Our finding that E15 is sub sim to Tier 3 E10 certification fuel when used in MY2001 and newer light-duty motor vehicles means that the class of vehicles covered by our sub sim determination encompasses those vehicles and engines for which we previously granted E15 partial waivers in 2010 and 2011, namely MY2001 and newer light-duty motor vehicles.

Comment:

One commenter argues that EPA lacks the factual record from which to determine that E15 is substantially similar to E10 with respect to emissions for MY2001 and later light-duty motor vehicles.

Response:

We disagree with commenter that EPA lacks the factual record from which to conclude that E15 is substantially similar to E10 with respect to emissions for MY2001 and later light-duty motor vehicles. As addressed elsewhere in this document, and as detailed in Sections II.C.6–7 of the final rule, we considered the emissions, materials compatibility, and driveability impacts of E15 on MY2001 and newer light-duty motor vehicles. Our sub sim finding for E15 is based on existing data and our engineering judgment. While we acknowledge that test data is still limited on Tier 3 vehicles, we were able to draw upon test data and information on prior year motor

vehicles to support our finding, as the impacts on Tier 3 motor vehicles are expected to be of a similar or lesser concern than on prior year motor vehicles.

Comment:

One commenter noted that in its prior interpretive rulemakings, EPA has never confronted a situation where a purported substantially similar fuel could not be used in a significant portion of the light-duty vehicle fleet.

Response:

We agree with commenter that EPA has not previously confronted a situation where a sub sim fuel could not be used in a portion of the light-duty vehicle fleet. As we explain in Section II.C.9 of the final rule, CAA sec. 211(f)(1) does not directly address whether and how EPA can restrict a substantially similar determination. When the provision was first enacted in 1977, there was only one certification fuel—indolene (or "E0"). However, since the enactment of CAA sec. 211(f)(1) in 1977, multiple fuels—including Tier 3 E10 certification fuel—have been used in the certification of vehicles and engines. As we explain in Section II.C.9 of the final rule, we interpret CAA sec. 211(f)(1) as providing EPA with the authority to make a sub sim determination subject to appropriate parameters.

Comment:

One commenter argues that the fact that EPA issued a partial waiver to E15 under CAA sec. 211(f)(4) does not mean that E15 is substantially similar to E10. The commenter argues that the use of the term "waive" in CAA sec. 211(f)(4) allows for EPA to make partial and total waivers, while CAA sec. 211(f)(1) does not support a partial sub sim determination.

Response:

We agree with commenter that the mere fact that E15 was granted a partial waiver under CAA sec. 211(f)(4) does not automatically mean that E15 is substantially similar to Tier 3 E10 certification fuel for use in all motor vehicles and nonroad vehicles, engines and equipment. However, as discussed in Sections II.C. 6–7 of the final rule, we have an adequate basis to support our sub sim finding that E15 is substantially similar to Tier 3 certification fuel when used in MY2001 and newer light-duty vehicles. We disagree that EPA lacks the authority to place limitations on our sub sim determination with respect to particular vehicles. As discussed in Section II.C.9 of the final rule, we interpret CAA sec. 211(f)(1) as providing EPA with the authority to make a sub sim determination subject to appropriate parameters.

Comment:

One commenter argued that the use of the term "or" in CAA sec. 211(f)(1) means that a fuel is not substantially similar if either of two conditions is not satisfied—either the fuel is not substantially similar to a fuel use in the certification of model year 1975, or the fuel is not substantially similar to a fuel used in a subsequent year. The commenter argues that the legislative history confirms this reading of the statute and that EPA has agreed with this understanding of Congress's intent. In support, commenter cites the CAA sec. 211(f)(4) partial waiver decision for E15 issued in 2010.

Response:

We disagree with commenter that use of the term "or" in CAA sec. 211(f)(1) means that a fuel is not substantially similar if either of two conditions is not satisfied (either the fuel is not substantially similar to a fuel use in the certification of model year 1975 or the fuel is not substantially similar to a fuel used in a subsequent year). We disagree with commenter's assertions that the legislative history supports this reading of the statute and that EPA has agreed with this understanding of Congress's intent. Under CAA sec. 211(f)(1), it is not necessary that a fuel be substantially similar to every fuel used in certification, only that the fuel be substantially similar to "any" fuel or fuel additive used in certification. Tier 3 E10 certification fuel is a fuel used in the certification of motor vehicles and falls within the scope of "any" fuel used in certification.

As explained in Section II.A.1 of the preamble to the final rule, when CAA sec. 211(f)(1) was enacted in 1977, Congress intended for CAA sec. 211(f)(1) to prevent the use of any new or recently introduced additive to unleaded gasoline that could impair the emission performance of vehicles. See S. Rep. No. 95-127, 95th Cong. 1st Sess. 90 (1977). Since the enactment of CAA sec. 211(f)(1), however, multiple fuels have been used in the certification of vehicles and engines. Since there are now multiple certification fuels in use, it is reasonable to interpret CAA sec. 211(f)(1) as providing EPA with the authority to make a sub sim determination with respect to the use of the new fuel within certain parameters, where those parameters are designed to prevent against the kinds of problems that the CAA sec. 211(f)(1) prohibition against introduction into commerce is designed to prevent. As we have previously stated: "Clearly Congress did not intend the use of the term 'any' in the prohibition to always mean all motor vehicles or 100% of the motor vehicle fleet." 75 FR 68094, 68145 (November 4, 2010). Therefore, as we explain in Sections II.A and II.C of the preamble to the final rule, it is reasonable to compare E15 to Tier 3 E10 certification fuel.

Comment:

A number of commenters supported EPA's ability to consider misfueling mitigation requirements to ensure the proper use of E15.

A number of commenters opposed any conditions on the E15 sub sim determination beyond those addressed by the CAA sec. 211(f)(4) partial waivers or the Misfueling Mitigation Rule issued pursuant to CAA sec. 211(c).

Response:

The conditions we are finalizing in this action are consistent with the conditions put in place for the CAA sec. 211(f)(4) partial waivers for E15 and the Misfueling Mitigation Rule. In the Misfueling Mitigation Rule, we promulgated a number of restrictions designed to limit the introduction into commerce of E15 to only MY2001 and newer light-duty vehicles. See 76 FR 44406 (July 26, 2011). As we explain in Section II.C.9 of the preamble to the final rule, the regulations put in place under the Misfueling Mitigation Rule remain in place. However, there are certain conditions contained in the CAA sec. 211(f)(4) partial waivers for E15 for which we did not promulgate regulations under the Misfueling Mitigation Rule. One such condition is the requirement that fuel and fuel additive manufacturers submit to EPA misfueling mitigation plans (MMPs) prior to introducing E15 into commerce. In addition to generally committing fuel and

fuel additive manufacturers to complying with the regulatory requirements of the Misfueling Mitigation Rule, MMPs commit fuel and fuel additive manufacturers to engaging in public outreach regarding the appropriate use of E15 and allow for specific, additional misfueling mitigation measures that may apply in a manufacturer's specific situation. We believe that continuing to require MMPs is important to preventing misfueling in vehicles, engines, and equipment other than MY2001 and newer light-duty vehicles, since we are now determining that E15 is sub sim to Tier 3 E10 certification fuel when used in MY2001 and newer light-duty vehicles.

Comment:

One commenter argued that EPA lacks the authority to impose misfueling mitigation conditions under CAA sec. 211(f)(1) and that doing so would circumvent EPA's authority under CAA sec. 211(c). Several commenters argue that EPA has the authority to control or prohibit the use of sub sim fuels if they are found to cause or contribute to emissions that endanger public health or welfare or impair to a significant degree the performance of an emission control device or system, but that EPA must undertake such a finding pursuant to CAA sec. 211(c).

Response:

We disagree with commenters that the sub sim finding we are making in this action would circumvent the requirements of CAA sec. 211(c). We also disagree that imposing misfueling mitigation controls as part of a sub sim determination is inconsistent with CAA sec. 211(f)(1). As we explain in Sections II.A.1 and II.C.9 of the preamble to the final rule, when CAA sec. 211(f)(1) was enacted in 1977, the intent behind the provision was to prevent the introduction into commerce of any new or recently introduced fuel additive that could impair the emission performance of vehicles. That is the same rationale underpinning the parameters we are setting for the sub sim determination we are now making for E15. In enacting CAA sec. 211(f)(1), Congress recognized that the analysis required to control or prohibit the manufacture or introduction into commerce of a fuel or fuel additive under CAA sec. 211(c) could be a lengthy process, and that the delay associated with taking action under CAA sec. 211(c) could result in a situation where parties could introduce into commerce a fuel with negative impacts on emission controls before a CAA sec. 211(c) action could be completed. See S. Rep. No. 95-127, 95th Cong. 1st Sess. 90–91 (1977). The enactment of CAA sec. 211(f)(1) sought to prevent such a situation from occurring. Given the rationale underpinning the enactment of CAA sec. 211(f)(1), it is reasonable for EPA to impose misfueling mitigation parameters as part of a CAA sec. 211(f)(1) sub sim determination.

See also our discussion in Section 1.3.2.2 of this document.

Comment:

Several commenters agreed that EPA may impose ethanol quality limitations as part of its sub sim criteria and suggested that EPA make clear that it is limiting its sub sim finding to E15 that is made from denatured ethanol meeting ASTM quality standards.

Response:

As discussed in Section II.C.9 of the final rule, we are updating the reference to the ASTM standards for sub sim to the latest version of ASTM International Standard D4814. We believe it

is appropriate that denatured fuel ethanol (DFE) used to produce E15 meet the latest ASTM International specifications for DFE, ASTM D4806-19. Also, as discussed in Section II.C.9 of the final rule, as suggested by commenters, we are requiring that gasoline-ethanol blends covered under this sub sim determination must meet the applicable distillation temperature specifications in ASTM D4814-19.

1.4 Regulatory Amendments

Commenters that provided comment on this topic include but are not limited to: 0580, 0583, 0748, 0804, 0851, 0854, 0864, 0877, 0882, 0894, 0895, 0912, 0913, 0914, 0918, 0920.

Comment:

Some commenters supported EPA's removal of no longer needed PTD language requirements. Other commenters requested that specific ethanol content disclosure must be required on PTDs to ensure accurate blending and help retail stations comply with EPA regulatory requirements at 40 CFR 280.32 and 80.1501-1509.

Another commenter suggested that EPA should not remove the PTD language requirements at 40 CFR 80.1503 as RVP is appropriate for the designation of the fuel to help ensure that the RVP was not exceeded. Commenter also suggested that EPA should expand the existing requirements that apply to 9-10 percent ethanol to encompass 9-15 percent ethanol within 40 CFR 80.1503 and 80.1504(g) if it allows E15 to receive the 1-psi waiver.

Response:

While we agree that ethanol content disclosure must be required on PTDs, we do not agree that we need to maintain the provisions at 40 CFR 80.1503 to do so. The regulations at 40 CFR 80.27(d)(3) require that PTDs for gasoline-ethanol blended fuels "contain a legible and conspicuous statement that the gasoline being shipped contains ethanol and the percentage concentration of ethanol." We promulgated this specific PTD language requirements for ethanol content to implement our prior interpretation that E15 did not receive the 1-psi waiver. Since this is no longer the case as a result of this action, we believe the PTD requirements under 40 CFR 80.27(d)(3) are sufficient to convey ethanol content to retailers.

Comment:

Several commenters argued that EPA's definition of 10-percent ethanol under CAA sec. 211(h)(4) should no longer include fuel blends containing 9-percent ethanol. Several commenters agreed with EPA's reasoning to extend the 1-psi RVP waiver to fuel blends containing up to 15 percent ethanol but argued that EPA should extend the 1-psi RVP waiver to fuel blends containing 9.5 to 15 percent ethanol—instead of 9 to 15 percent ethanol, as EPA proposed. One commenter argued that since EPA is correctly interpreting "contains 10 percent" ethanol to mean "at least 10 percent" ethanol, then EPA should select a percentage than can round up to 10 percent, specifically 9.5 percent. Another commenter similarly argued that EPA could conceivably construe the term "10 percent" to include figures ranging from 9.5 to 10.4 percent, so that when rounded to the nearest whole percentage point, the number would be 10 percent. Several commenters acknowledged that it is almost impossible to ensure a fuel blend contains exactly 10 percent ethanol.

Several commenters argued that while the agency's new interpretation of CAA sec. 211(h)(4) applies to fuel blends containing at least 10 percent ethanol, EPA's proposed regulations would set a ceiling of 15 percent ethanol in fuel blends. Commenters argues that this will impede the introduction of higher gasoline-ethanol blends in the future and opposes the proposed 15 percent ethanol limit. The commenter argues that EPA should provide a 1-psi RVP waiver to all gasoline

containing at least 9 percent ethanol. The commenter also argues that the amendments to 40 CFR 80.28(g) are unnecessary to enforce the new sub sim finding and would impede the introduction of higher gasoline-ethanol blends into the market because such blends would be unable to take advantage of the compliance mechanisms granted to E10 and E15.

Response:

As discussed in Section 1.2.2.1 of this document, such comments are beyond the scope of this rulemaking. In this action, EPA proposed to interpret CAA sec. 211(h)(4) to apply to blends higher than 10 volume percent ethanol. We did not propose to revise our interpretation that blends containing 9 volume percent ethanol may also receive the 1-psi waiver. As explained in the NPRM, we are not changing our definition of the term 10 volume percent ethanol, which includes as little as 9 volume percent ethanol, to continue to accommodate existing blending practices for E10.⁴⁶

Comment:

Commenters suggest that EPA should change the 9 volume percent minimum in 40 CFR 80.27 to 10 volume percent minimum because that is most consistent with EPA's new CAA sec. 211(h)(4) interpretation.

Response:

As discussed above at Section 1.2.2.1 of this document, we did not propose to alter the minimum ethanol volume required to apply the 1-psi waiver. Therefore, we treat this comment as beyond the scope of this rulemaking.

Comment:

Commenters suggested that EPA should eliminate the survey requirement at 40 CFR 80.1502 to conduct RVP testing.

Response:

As discussed in the NPRM, there are potential RVP compliance issues with E15 made at blender pumps. Since this provision is promulgated under CAA sec. 211(c) and was justified on ensuring that E15 continued to meet RVP requirements under CAA sec. 211(h), we believe RVP testing is still needed to ensure that E15 continues to meet 10.0 with the 1-psi waiver. Removing the survey requirement at 40 CFR 80.1502 to conduct RVP testing is outside the scope of this action.

Comment:

Commenters suggested that EPA should not specify an ethanol concentration in our regulations and should instead allow for any ethanol concentration permitted by a CAA sec. 211(f)(4) waiver or a sub sim finding. Other commenters suggested that EPA should remove any upper limits on ethanol content at all. Commenters suggested limiting it to E15 would be inconsistent with EPA's interpretation that CAA sec. 211(h)(4) extends the 1-psi waiver to all fuels which contain at least 10 percent ethanol. They argued this creates a new barrier for higher level gasoline-ethanol blends.

⁴⁶ See footnote 64 of the NPRM.

Response:

See discussion of this issue in Section II.D.1 of the final rule. We find that a fuel being sub sim or having a waiver under CAA sec. 211(f)(4) informs the upper limit for the fuels which can apply the 1-psi waiver. At the current time, this is only E10 and E15.

1.5 Effects on Blender Pumps

Commenters that provided comment on this topic include but are not limited to: 0544, 0546, 0580, 0584, 0585, 0587, 0756, 0780, 0794, 0804, 0809, 0821, 0848, 0851, 0854, 0856, 0864, 0877, 0882, 0889, 0895, 0904, 0908, 0910, 0911, 0918, 1107.

Comment:

Commenters argued that E15 should not qualify for the 1-psi waiver at blender pumps when using E85 produced with natural gasoline and that it is likely that E15 made at blender pumps with E85 produced from natural gasoline would often violate the applicable RVP standards even with the 1-psi waiver. Commenters note that based on laboratory data, the vapor pressure of natural gasoline can exceed 15 psi and given typical blending rates, this can result in the RVP of E15 made at blender pumps with E85 produced from natural gasoline often violating the applicable RVP standards, even with the 1-psi waiver. EPA should not allow E15 made at blender pumps under these conditions to receive the 1-psi waiver.

Commenters suggested that EPA's treatment of blender pump operators as fuel manufacturers will eliminate the use of E85 made with NGLs resulting in increased E85 prices and decreasing E85 use. EPA should clarify that blender pump operators are not fuel manufacturers and not subject to EPA's regulatory requirements. Commenters suggested that much of the E85 used to make E15 at blender pumps contain natural gasoline denaturant that meets T3 sulfur limits. Commenters argued further that a prohibition on blending E15 using E85 made with natural gasoline would make it impossible for many retailers to continue to economically buy E85 and sell less expensive fuels like E15 to their customers. Commenters suggested that EPA's approach to E15 made at blender pumps using natural gasoline is incompatible with the goal of increasing access to E15. They argue this would make it impossible for many retailers to economically buy E85 and sell E15. They place the blame on terminal operators for failing to make affordable E85 available.

Commenters urged EPA to finalize provisions from the Renewable Fuel Enhancement and Growth Support (REGS) Rule to allow the use of natural gasoline as a blendstock in E15 production. Other commenters suggested that we should finalize these provisions of the REGS rule if we have legitimate concerns over E15 made via blender pumps with E85 (made with natural gas liquids). Commenter suggested that EPA delay enforcement of its proposed approach to limit E15 made via blender pumps with E85 (made from natural gas liquids) until after EPA has finalized the applicable provisions in the REGS rule.

A commenter argued that having E85 meet ASTM specifications and using denaturant that meets the Tier 3 sulfur requirements for ethanol denaturant would satisfy RVP requirements for E15 made via a blender pump with E10 and E85 (made with natural gas liquids). The commenter also argued that EPA did not present data from the E15 survey that demonstrates that violations occurred due to natural gas liquids present in E15 made at blender pumps. Commenters request that EPA should consider a more flexible approach to regulation of E15 made at blender pumps. They suggested that most of the retail dispensers selling E15 are blender pumps making E15 from E85 and E10. E15 made from E10 and E85 (made with natural gas liquids) typically results

in just 1 percent NGLs in the E15. EPA has acknowledged that it is possible to make E15 compliant with applicable fuels regulations in 40 CFR part 80 in this manner in the REGS rule.

Commenters suggested that EPA is imposing new regulatory burdens on blender pumps that produce E15 from E85 made with natural gasoline. They suggested that treating these parties as fuel manufacturers and refiners would result in hundreds of retailers being retroactively liable for violating compliance requirements that they cannot comply with. Commenters suggested that EPA should exempt blender pump operators from the compliance requirements for fuel manufacturers and refiners and should control the quality of E85 through regulations proposed in the REGS rule.

Response:

E15 is allowed to be blended at blender pumps as long as only certified components are used Cases where blender pumps introduce uncertified components into gasoline continue to be illegal and may result in fuel that exceeds gasoline quality standards. Parties that blend uncertified components into previously certified gasoline are considered fuel manufacturers under the regulations at 40 CFR part 79 and refiners under 40 CFR part 80.Our interpretation of how our fuel regulations, particularly with respect to requirements for fuel manufacturers and refiners, apply to blender pumps making E15 using natural gasoline is not novel or new, nor does it change the existing treatment of blender pumps making E15 in this way under our regulations.⁴⁷ We did not propose to revise any requirements applicable to blender pumps, and addressing this issue is beyond the scope of this rulemaking.

Comment:

One commenter asked EPA to confirm that the relabeling of blenders pumps in the summer months for E15 use only in FFVs as a mechanism to avoid E15 being subject to the volatility provisions under CAA sec. 211(h) and 40 CFR 80.27 is illegal. Other commenters also suggested a burden for blender pumps to have to relabel E15 as for use only in flex-fuel vehicles.

Response:

Parties may not relabel fuel dispensers to limit E15 for use in FFVs and engines as a mechanism to avoid complying with EPA's fuels regulations at 40 CFR parts 79 and 80. During the summer (May 1 through September 15), gasoline must meet the applicable volatility requirements under the regulations at 40 CFR 80.27. E15 is considered gasoline for purposes of compliance with the regulations at 40 CFR parts 79 and 80. As discussed in the Tier 3 final rule, the proposed REGS rule, and the proposal for this action, the regulations at 40 CFR parts 79 and 80 treat gasoline-ethanol blends containing up to 50 volume percent ethanol as "gasoline" for purposes of complying with the regulations at 40 CFR parts 79 and 80. The gasoline regulations at 40 CFR parts 79 and 80 apply regardless of whether gasoline (in this case a gasoline-ethanol blend containing up to 50 volume percent ethanol) is labeled for use in gasoline-fueled vehicles and engines or flexible-fueled vehicles and engines. The NPRM did not propose to modify the relevant regulations at 40 CFR parts 79 and 80 and, as such, this action does not finalize any changes to the relevant regulations.

⁴⁷ See 79 FR 23557-23558 (April 28, 2014) and 81 FR 80841-80843 (November 16, 2016).

Comment:

One commenter asked EPA to address the situation of E15 containing more than 15 volume percent ethanol made from blender pumps due to variable ethanol levels in E85 used to make E15. The commenter suggested that EPA should amend the regulations at 40 CFR part 80, subpart N, to address the situation where E10 is co-dispensed from the same nozzle/hose with E15 or E85 (potentially resulting in gasoline-ethanol blended fuels constraining more than 10 volume percent ethanol) to avoid inadvertent misfueling.

Response:

The prohibitions on the use of E15 in older vehicles, nonroad vehicles, engines, and equipment will remain in place, as well as the current misfueling mitigation requirements. Additionally, we are maintaining the misfueling mitigation plan requirement under the sub sim determination in this action. We believe that these misfueling mitigation measures adequately address concerns where E15 is co-dispensed with either E10 or E85. We will continue to monitor the gasoline market and work with affected stakeholders to better understand the issues associated with E15 misfueling and whether we need to take further actions at a later time.

Comment:

One commenter suggested that EPA's position in the NPRM on blender pumps constitutes a change from its current regulations. The commenter believes that these changes is subject to the Administrative Procedures Act and EPA should consider public comments prior to making this change and must issue a supplemental notice to call for public comments on the issue before finalizing the change.

Response:

In the NPRM, we did not propose to change the applicability of our current regulations to blender pumps. We have previously identified this issue specifically in two prior actions: the Tier 3 final rule and the proposed REGS rule. ⁴⁸ To the extent we received comments addressing this issue in the proposed REGS rule, we intend to address those comments in our final action on that proposal.

⁴⁸ Id		

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1.6 E15 Misfueling Mitigation

Commenters that provided comment on this topic include but are not limited to: 0073, 0534, 0580, 0611, 0757, 0796, 0798, 0799, 0805, 0808, 0809, 0830, 0851, 0853, 0854, 0858, 0862, 0873, 0903, 0913, 0917.

Comment:

Commenters stated that this action would greatly increase the risk of inadvertent misfueling of vehicles, engines, and equipment not allowed to use E15 by limiting the availability of E0 or E10.

Response:

As discussed in Section II.E of the final rule, while this action clears one hurdle to the increased penetration of E15 into the marketplace, a number of other hurdles remain, and we do not believe that this final rule will appreciably increase the penetration of E15. In addition, the prohibitions on the use of E15 in older vehicles, nonroad vehicles, engines, and equipment will remain in place, as well as the current misfueling mitigation requirements. We will continue to monitor the gasoline market and work with affected stakeholders to better understand the issues associated with E15 misfueling and whether we need to take further actions at a later time.

Comment:

Commenters suggested that EPA should revisit the E15 label to ensure that consumers understand E15 is incompatible with older vehicles, motorcycles, ATVs, boats, small engines, and other machines. EPA should modify the E15 label language to point consumers to check their owner's manual to ensure the vehicle manufacturer recommends using E15. EPA should change the "up to 15% ethanol" to "Contains 11-15% ethanol". EPA should require labels to be placed either on the button, directly above the button where the consumer would selected E15 for fueling, or adjacent to the anti-knock index information. Another commenter suggested that EPA should include change the word "Attention" to "Warning" and make the label much larger than the current size. Commenters also argued that the label should include pictograms depicting a classic vehicle, boat, motorcycle, ATV, lawnmower, chainsaw, and snowmobile as products not allowed to use E15. One commenter also suggested that label should include information related to the decrease fuel economy relative to E0/E10.

Commenters also suggested that EPA should lead a consumer outreach effort to inform consumers to help avoid the misfueling of E15 into vehicles, engines, and equipment not approved to use E15. Another commenter suggested that EPA and those advocating for a change should develop solutions for misfueling.

Response:

These were issues that were addressed in the process of developing the existing misfueling mitigation requirements, and EPA did not propose to modify them in this rulemaking action. As discussed in Section II.E of the final rule, while this action clears one hurdle to the increased penetration of E15 into the marketplace, a number of other hurdles remain, and we do not believe that this final rule will appreciably increase the penetration of E15. We will continue to monitor

the gasoline market and work with affected stakeholders to better understand the issues associated with E15 misfueling and whether we need to take further actions at a later time.

Comment:

Commenters suggested that EPA should do something about the marketing of E15 as "Unleaded 88" or "Regular 88" as this undermines the effectiveness of EPA's E15 labeling requirements. Another commenter argued that EPA should work with the Federal Trade Commission on fair marketing so unleaded 88 is not used as a workaround to EPA's E15 labeling requirements. Another commented that "unleaded 88" should only be used with a clear ethanol content label as to not cause consumer confusion.

Another commenter suggested that EPA should impose national uniform labeling requirements for gasoline that contains 10 percent ethanol or less.

Commenters also suggested that the existing E15 misfueling mitigation measures are inadequate and that EPA should impose new misfueling mitigation measures. Such measures could include keypad authorization at fuel dispenses, which are currently available at most retail stations or physical barriers to use of E15 which make it more difficult for consumers to use the fuel. EPA should consider the costs to consumers of misfueling and whether they justify imposing new misfueling mitigation measures. Such measures could also include the use for radio frequency identification (RFID). Commenters suggest that recent polling data indicate the misfueling of E15 in nonroad vehicles, engines and equipment is on the rise. Other commenters argue that E15 has been sold for many years at hundreds of retail stations and no instances of misfueling have ever been reported.

Commenters suggest that current misfueling mitigation measures are adequate and that any misfueling is a result of EPA's failure to enforce the existing regulatory requirements involving misfueling. Commenters also suggest that EPA increase its enforcement of violators of the MMR.

Commenters suggested that EPA should require the use of keypad authentication for consumers at retail stations that offer E15 prior to fueling as a way to further mitigation misfueling. Other commenters suggested that EPA specify different sized nozzles for E15.

Other commenters requested that we evaluate the potential costs associated with these and other misfueling mitigation strategies. They note that adding new misfueling measures would be expensive, impractical to implement, and ineffective at further mitigating the misfueling of E15. New misfueling mitigation measures would also disproportionately place burdens on small businesses. Suggested changes for keypad verification, using different fuel pump sizes for E15, fuel pump nozzle grips for E15, and the use of radio frequency identification technologies are expensive, incompatible with existing retail infrastructure, and unnecessary. Since there is no reported misfueling, any benefits from additional measures would eclipse the costs of imposing new misfueling mitigation measures for E15.

Response:

We did not propose to modify pump labels or impose new misfueling mitigation measures in this rulemaking action to address existing concerns. As discussed in Section II.E of the final rule, while this action clears one hurdle to the increased penetration of E15 into the marketplace, a number of other hurdles remain, and we do not believe that this final rule will appreciably increase the penetration of E15. We will continue to monitor the gasoline market and work with affected stakeholders to better understand the issues associated with E15 misfueling and whether we need to take further actions at a later time.

Comment:

Commenters suggested that EPA should maintain all misfueling mitigation provisions of 40 CFR part 80, subpart N.

Response:

This action maintains all misfueling mitigation provisions of 40 CFR part 80, subpart N. As discussed in Section II.D of the final rule, we made some regulatory amendments to 40 CFR part 80, subpart N to effectuate our new interpretations under CAA secs. 211(f) and (h).

Comment:

Commenter argued that EPA should consider removing some of the onerous misfueling mitigation provisions as they are no longer necessary.

Response:

We disagree that E15 misfueling mitigation measures are no longer necessary. As we explained in the MMR, test data and other information including engineering analysis demonstrate E15 could have a significant adverse impact on the emissions and emissions controls of MY2000 and older light-duty motor vehicles, heavy-duty motor vehicles, and nonroad products. Since there are still tens of millions of motor vehicles and hundreds of millions of nonroad products that cannot use E15, we believe it will continue to be necessary to have misfueling mitigation measures in place. Furthermore, without the E15 misfueling mitigation measures, we could not find E15 to be sub sim to Tier 3 E10 certification fuel under CAA sec. 211(f)(1). We will continue to monitor the gasoline market and work with affected stakeholders to better understand the issues associated with E15 misfueling and whether we need to take further actions at a later time.

1.7 E15 Emission Impacts

Commenters that provided comment on this topic include but are not limited to: 0671, 0730, 0748, 0753, 0803, 0807, 0809, 0820, 0830, 0864, 0878, 0882, 0889, 0890, 0894, 0910, 0911, 0913, 0914, 0917, 0919.

Comment:

Commenters argued that while the disbenefits of going from E10 to E15 may be small on an individual vehicle basis, when applied to the national vehicle fleet, these small changes can have large AQ effects.

Commenters argued that increases in emissions from E15 could cause localized concerns with air quality, potentially causing areas to be reclassified as nonattainment under the CAA. In particular, commenters argue that the potential NO_x increases from going to E15 from E10 in the vehicle fleet may outweigh any benefit in VOCs from the relative decrease in RVP from going to E15 to E10 if the same gasoline blendstock was used.

Other commenters pointed to positive impacts of ethanol use on VOC, CO, and HC emissions. Commenters argue that reducing RVP value of blendstocks would encourage/lead to reduction in harmful aromatics. Commenters noted that the real-world evidence shows use of gasoline-ethanol blends reduces emissions of carbon monoxide, particulate matter, air toxic chemicals, and GHGs compared to burning petroleum gasoline. This results in better overall air quality than when vehicles burn conventional gasoline, significantly improving public health.

Response:

As discussed in Section II.E of the final rule, we do not believe that providing E15 with the 1-psi waiver will substantially change the current trend in E15 use. This rule is not a mandate for E15. Rather it simply removes one of several hurdles to increased E15 use that is within EPA's authority to address. Because a number of other hurdles remain, we do not anticipate that E15 use will increase significantly as a result of this action. Consequently, air quality impacts of this action will be limited. For the same reason, we do not anticipate significant effects on GHG emissions or air toxics as a result of this action. Furthermore, even if E15 use were to change, as discussed in Section II.F of the final rule, the emission impacts of giving E15 the 1-psi waiver are expected to be minimal. E15 will be held to the same RVP as E10 currently, resulting in no increase in evaporative emissions. E15 made with the same gasoline components as E10 will be expected to result in small increases in NMOG, NO_x, and PM and small decreases in CO and benzene.

Comment:

One commenter argued that the RVP increase caused by blending ethanol into gasoline is not linear. The commenter points to existing data, published by EPA in 1995, which depict a peak in the RVP between 10 and 15 volume percent. While E15 RVP may not be materially different than E10 RVP, the presence of E15 in the market inevitably leads to the presence of mixtures between 10 and 15 volume percent in service station tanks and vehicle fuel tanks. As these will have a higher RVP than either E10 or E15, this will lead to excess evaporative VOC emissions from these sources. Increased emissions of gasoline toxics, particularly benzene, will also occur.

Response:

We agree with the commenter that the RVP increase with ethanol is not linear, but we disagree about the gasoline-ethanol blend percentage where the peak occurs. Published work from 1985 (SAE Technical Paper 852116) showed a peak below 10 volume percent ethanol. A more recent, and authoritative work on this was conducted by API (Determination of the Potential Property Ranges of Mid-Level Ethanol Blends; American Petroleum Institute; April 23, 2010). It did not look at ethanol concentrations below 10 volume percent but reaffirmed that the RVP increase resulting from blending ethanol declines above 10 percent ethanol. The executive summary of that report states: "Vapor pressure typically rises with the addition of ethanol to gasoline. The increase is greatest at 10% by volume. At higher concentrations, the vapor pressure of the blend decreases." What is particularly compelling about this study is that API obtained 71 ethanol-free gasoline samples from the marketplace representing six different ASTM volatility classes. Thus, the study evaluated the impact of ethanol on real world gasoline samples. As a result, E15 and commingled mixtures of E10 and E15 would tend to have slightly lower RVP than E10, not higher.

Comment:

Commenters suggested that increased E15 use will result in greater corn production for ethanol, which will result in negative impacts to air, water, soil, land, and wildlife habitat. Commenters pointed to EPA's recent report under EISA sec. 204 that highlights the negative impacts associated with corn production for ethanol resulting from the RFS program. Commenters suggested that expansion of E15 resulting from this action will lead to increased corn ethanol production and use will result in greater lifecycle GHG emissions as detailed in reports from the National Academies of Sciences and the Government Accountability Office.

Response:

As discussed in Section II.E of the final rule, we do not believe that providing E15 with the 1-psi waiver will substantially change the current trend in E15 use. This rule is not a mandate for E15. Rather it simply removes one of several hurdles to increased E15 use that is within EPA's authority to address. Because a number of other hurdles remain, we do not anticipate that E15 use will increase significantly as a result of this action. Consequently, any environmental impacts of this action will be limited. Furthermore, any changes in E15 use are not expected to have an appreciable impact on domestic ethanol consumption (which is projected to decline with falling gasoline demand) or any impact on domestic ethanol production (which is continuing to rise with strong exports), and therefore no direct connection to corn production. ⁴⁹

Comment:

Commenters suggested EPA did not characterize or quantify the impact of the proposed rule on emissions from the MY2001 and newer light-duty motor vehicle fleet.

Response:

These impacts are discussed in Sections II.C and II.F of the final rule.

⁴⁹ See "Endangered Species Act No Effect Finding for the Rule Modifying Fuel Regulations to Provide Flexibility for E15 and Modifying RFS RIN Market Regulations," memorandum from EPA Staff to Docket EPA-HQ-OAR-2017-0775.

Comment:

Commenters suggested that EPA only has volatility standards in the summer because emissions due to gasoline volatility are so small.

Response:

Commenter incorrectly links the magnitude of gasoline emissions with the summertime volatility standards. EPA has only put in place summertime volatility standards because the increased emissions caused by high gasoline volatility contribute to ozone during the summer months. Ozone is a serious public health concern but occurs almost exclusively during the summer months due to the influence of temperature and sunlight in its formation. In addition to EPA's volatility standards for air quality purposes, the industry imposes volatility limits year-round on gasoline to ensure proper vehicle startability and driveability.

Comment:

Commenters suggested that EPA failed to consider evaporative emissions decreases from increased E15 at 9.0 psi use over time. If E15 does not receive the 1-psi waiver, any new E15 in the summer will result in a relative decrease in evaporative emissions when compared to the current in-use fuel of E10 at 10.0 psi RVP.

Response:

Were the volatility of gasoline to be reduced back down to 9.0 psi RVP, the level on which vehicles are designed and certified, as the commenter suggests, it would likely reduce excess vehicle emissions occurring today with E10 at 10.0 psi. However, due to the various hurdles associated with expanding E15 use, we do not anticipate that E15 use will increase significantly with or without this action, and therefore is an ineffective tool to lower the volatility of in-use gasoline back to 9.0 psi RVP and address the excess emissions associated with E10.

Comment:

Commenters pointed to GHG benefits from ethanol use.

Response:

As discussed in Section II.E of the final rule, we do not believe that providing E15 with the 1-psi waiver will substantially change the current trend in E15 use. This rule is not a mandate for E15. Rather it simply removes one of several hurdles to increased E15 use that is within EPA's authority to address. Because a number of other hurdles remain, we do not anticipate that E15 use will increase significantly as a result of this action. Furthermore, given that E15 growth also displaces E10 use, the impact on overall ethanol use (which is projected to decline with falling gasoline demand) and thus on lifecycle CO₂ emissions is expected to be insignificant.

1.8 E15 Economic Impacts

Commenters that provided comment on this topic include but are not limited to: 0534, 0569, 0570, 0583, 0753, 0799, 0808, 0851, 0863, 0865, 0872, 0880, 0889, 0898, 0910, 0917, 0919.

Comment:

A commenter suggested that increasing use of ethanol has saved consumers \$7 billion from 2008–2016. Commenter also suggested that a complete switch from E10 to E15 could result in \$9.5 billion in savings per year.

Commenters suggested that granting E15 the 1-psi waiver will result in an immediate increase in demand for ethanol. Commenters also suggested that granting E15 the 1-psi waiver will lead to 1.3 billion gallons of ethanol in 5 years. One commenter also suggested that the USDA Biofuels Infrastructure Program shows increased sales of E15 when offered at retail stations.

Another commenter suggested that allowing E15 to receive the 1-psi waiver would increase the volumes of ethanol that can be blended to satisfy obligated parties' RVOs, which would decrease D6 RIN prices.

Commenters suggest that E15 use will increase the use of ethanol, increase the number of jobs for and help farmers, reduce gasoline price volatility, and provide energy security.

Conversely, other commenters suggested that E15 will not be widely adopted without an E15 mandate due to lack of consumer confidence in E15, lack of compatible retail infrastructure, and confusion at the pump over what vehicles, engines, and equipment can use E15.

Commenters also argued that EPA failed to consider the numerous costs of E15 what would be exacerbated by any increase in the fuel's use as a result of this action. EPA ignores costs from corn ethanol presented in the 2019 RVO rule and the recent EISA sec. 204 report. EPA also must consider the costs associated with retailers upgrading infrastructure to accommodate E15 and costs to consumers for damages to vehicles, engines, and equipment not allowed to use E15.

Commenters argued that EPA must consider additional costs associated by government agencies (like USDA) or Congress appropriating money for further retail infrastructure investments to accommodate E15 expansion. Commenters also argue that E15 expansion will not lead to long-term resiliency for agriculture, result in higher food and feed costs, and increase crop insurance costs.

Commenters also argued that increased ethanol use from this action could increase food prices.

Response:

As discussed in Section II.E of the final rule, we do not believe that providing E15 with the 1-psi waiver will substantially change the current trend in E15 use. This rule is not a mandate for E15. Rather it simply removes one of several hurdles to increased E15 use that is within EPA's authority to address. Because a number of other hurdles remain, we do not anticipate that E15 use will increase significantly as a result of this action. Furthermore, given that E15 growth also

displaces E10 use, the impact on overall ethanol use (which is projected to decline with falling gasoline demand) is expected to be insignificant. Therefore, estimating costs and cost savings from more sweeping growth in ethanol use resulting from this action would be inappropriate. To the extent that subsequent actions are taken by other government agencies to support the growth of E15 use, the costs of those actions would not be appropriate to attribute to this action.

1.8.1 Benefits for E15 RVP

Commenters that provided comment on this topic include but are not limited to: 0545, 0730, 0748, 0753, 0768, 0797, 0807, 0877, 0889, 0911.

Comment:

Commenters suggested that E15 use will reduce the costs of gasoline by 3 to 10 cents per gallon relative to E10. Other commenters cited a report that E15 could save consumers at least 34 cents per gallon.

Commenters suggested that increased E15 use would result in cost savings since E15 typically costs 2-10 cents less per gallon than E10 and has a higher octane rating, resulting in higher quality fuel and money savings for consumers. Commenters also noted that that E15 would increase torque in performance applications.

Response:

There is no certainty that E15 will save consumers money. E15 fuel has about 1.6 percent less energy per gallon than E10 (ethanol has 2/3 the energy per gallon as E0 gasoline). Multiplying this factor by a recent market price of gasoline (\$2.85/gal) suggests that E15 should be at least 4.5 cents/gal cheaper for the consumer to break even. However, given that ethanol has seldom been cheaper than gasoline on an energy equivalent basis historically, the price of gasoline would have to increase relative to that of ethanol in the future for E15 to save consumers money. Regarding benefits of higher octane, a recent study published by CRC involving 16 recent model-year vehicles showed that premium-grade fuel did not have a statistically significant effect on fuel economy (on average across the test vehicles) when operating over a test cycle representative of typical suburban driving. ⁵⁰

⁵⁰ Morgan, Peter; Smith, Ian; Premnath, Vinay; Kroll, Svitlana; Crawford, Robert. *Evaluation and Investigation of Fuel Effects on Gaseous and Particulate Emissions on SIDI In-Use Vehicles*. SwRI 03.20955. Southwest Research Institute, San Antonio, TX. CRC E-94-2. Coordinating Research Council, Alpharetta, GA. March, 2017

1.8.2 Costs for E15 RVP

Commenters that provided comment on this topic include but are not limited to: 0534, 0611, 0757, 0798, 0799, 0803, 0841, 0858, 0862, 0864, 0889, 0903, 0911.

Comment:

Commenters suggested that EPA did not address potential impacts of E15 on the fuel transportation, distribution, storage, and refueling infrastructure. E15 used in infrastructure that is not compatible can lead to property damage, adverse environmental impacts, and increased costs. Commenters noted that almost all underground storage tank (UST) systems and many fuel dispensers installed prior to 2011 are incompatible with E15. Commenters suggested that E15 could cause a number of underground storage tank leaks due to incompatible UST systems costing substantial amounts of money to clean up and install new USTs. Such leaks can harm water quality and put financial strain on state funds designed to clean up leaky USTs.

Commenters noted that around 85 percent of retail infrastructure is not compatible with E15. This barrier to entry will make E15 adoption slow and this rule will not address this barrier. rulemaking. A commenter recommended that EPA should conduct a comprehensive review, including testing, of all types of UST systems and their components for compatibility with E15. Without another pathway developed to safely and legally store E15 in existing UST systems, the expansion of E15 will be limited to only new fueling installations with equipment specifically listed for the sale of E15 or higher gasoline-ethanol blends.

Response:

As discussed in Section II.E of the final rule, we do not believe that providing E15 with the 1-psi waiver will substantially change the current trend in E15 use. This rule is not a mandate for E15. Rather it simply removes one of several hurdles to increased E15 use that is within EPA's authority to address. Because a number of other hurdles remain, we do not anticipate that E15 use will increase significantly as a result of this action. One of the other main hurdles is the very issue highlighted by the commenters—the fact that E15 is not compatible with and/or known to be compatible with most of the gasoline retail infrastructure. Existing laws, requirements, and policies therefore preclude E15's use in retail and distribution infrastructure for which is it not known to be compatible, and the capital costs to upgrade the systems to be compatible with E15 may be prohibitive. Consequently, the impacts of this action will be limited.

Comment:

Commenter argues that costs for upgrading retail stations to be compatible with E15 is overblown. Hanging hardware can be upgraded for as little as \$1,000 and according to audits by the U.S. Department of Energy's National Renewable Energy Lab (NREL), nearly all USTs and systems can safely store up to 100 percent ethanol.

Response:

Much has been said on this topic ever since the E15 partial waivers were granted by EPA beginning in 2010. The incremental cost to make E15 available can be modest for retail outlets that have all the documentation for every component in their fuel systems, including the pipe dope (often the weakest and most unknown link) that was used to join the components together

and that documentation demonstrates compatibility with E15. Unfortunately, the number of retail outlets possessing that data and information is very limited, and without that information there is no certainty of compliance with existing laws and insurance requirements. The result is that E15 capability at retail tends to be installed mostly in new build situations where the incremental cost is less significant. Data collected as part of USDA's recent BIP program may soon help better quantify the costs.

Comment:

Commenters noted that EPA should consider the costs of the misfueling of E15 in vehicles, engines, and equipment not allowed to use E15.

Response:

As discussed in Section II.E of the final rule, while this action clears one hurdle to the increased penetration of E15 into the marketplace, a number of other hurdles remain, and we do not believe that this final rule will appreciably increase the penetration of E15. In addition, the prohibitions on the use of E15 in older vehicles, nonroad vehicles, engines, and equipment will remain in place, as well as the current misfueling mitigation requirements. We will continue to monitor the gasoline market and work with affected stakeholders to better understand the issues associated with E15 misfueling and whether we need to take further actions at a later time.

1.9 Other E15 Issues

Commenters that provided comment on this topic include but are not limited to: 0436, 0534, 0546, 0611, 0748, 0750, 0757, 0768, 0801, 0805, 0817, 0820, 0849, 0851, 0853, 0858, 0862, 0865, 0877, 0879, 0907, 0912.

Comment:

Commenters suggested that allowing E15 the 1-psi waiver would result in a competitive disadvantage for retail stations that do not offer E15 since stations that offer E15 can sell it cheaper and many retailers cannot afford to upgrade retail station infrastructure to be compatible with E15.

Response:

This rule is not a mandate for E15. Rather it simply removes one of several hurdles to increased E15 use that is within EPA's authority to address. It will be up to individuals in the marketplace to decide whether or not to take advantage of the flexibility offered.

Comment:

Commenters requested that EPA should modify the sub sim definition to update obsolete version of ASTM D4814-88, which is 30 years old, with the modern current version ASTM D4814-19. ASTM D4814-88 is no longer available from ASTM International. Many things have changed over the years. The current version addresses EPA vapor pressure regulations. Based on vehicle test programs conducted by CRC, some of the volatility limits have changed as fuels and vehicles have changed over time. Sub sim states "The fuel must possess, at the time of manufacture as specified in ASTM Standard D4814–88 for at least one of the Seasonal and Geographical Volatility Classes specified in the standard." One property that is of concern is the minimum limit for the 50 percent Evaporated Distillation Point. If the change from ASTM D4814-88 to ASTM D4814-19 is not adopted, many blends on the market today that meet ASTM standards which are specified by many states will continue to be in violation of sub sim volatility requirements.

Response:

We agree with these comments and have referenced the latest version of ASTM Standard D4814 in this action.

Comment:

One commenter suggested that EPA's use of the term "gasoline" to include gasoline-ethanol blends is confusing and inconsistent with the terminology used in certain ASTM international standards. One meaning is based on the traditional dictionary one where gasoline consists of hydrocarbons with traces of contaminants. The commenter noted that the other use is that gasoline covers blends with ethanol (e.g., gasoline must contain at least 9 percent ethanol, gasoline must contain denatured anhydrous ethanol, gasoline that contains up to 15 volume percent ethanol, allowable ethanol concentration in gasoline). The commenter noted further that most of the proposed rule uses gasoline-ethanol blends to describe gasoline-ethanol blends (e.g., gasoline-ethanol blends of up to 15 percent ethanol, blends of gasoline and up to 10 percent ethanol had a waiver under CAA sec. 211(f)(4)). Commenter highlights that the simple gasoline-

ethanol blend terminology was first used in ASTM standards in 1988 and now appears in many of them. Regulations, bulletins, publications, etc. issued by ASTM, SAE, API, UL, NFPA, NIST, as well as some Code of Federal Regulations, and Federal Register use gasoline-ethanol blends terminology.

Response:

We explain the use of the terms "gasoline," "gasoline-ethanol blend," and "gasoline-ethanol blended fuel" in Section I.B of the final rule. In order to ensure that fuels that fail to meet applicable fuel quality standards specified in the regulations at 40 CFR part 80 continue to be subject the applicable standards, we define and use these terms more broadly than how they are defined and used in ASTM standards.

Comment:

One commenter noted that the proposal did not mention that the current 1-psi waiver for E10 does not apply to RFG and to some State Implementation Plans (SIPs) blends. For completeness, it should be noted that these prohibitions also will apply to E15.

Response:

In the NPRM⁵¹ acknowledged and Section II.A.2 of the final rule notes that the 1-psi RVP waiver does not effectively apply to E10 today and will not to E15 in reformulated gasoline (RFG) areas as a result of this action since RFG has a summer VOC emissions performance standard that takes into account the effects of ethanol on RVP when blended to make RFG. Similarly, we note that some state fuels programs do not allow the 1-psi waiver for E10. These state fuel programs are listed on our website.⁵²

Comment:

Commenters recommended that EPA require the continued sale of E10 and E0 fuels, as well as require fuel retailers to maintain a dedicated pump for E0 or E10 gasoline.

Response:

This action does not impose an obligation for any party to make, distribute, sell, or use E15. Mandating the availability of E10 or E0 is outside the scope of this action.

Comment:

Commenters suggested that ethanol in gasoline reduces emissions of particulate matter and air toxics such as benzene, toluene, and xylene. Commenters suggested that this results from a reduction in aromatics used when refiners make gasoline for ethanol blending because ethanol provides an octane source that does not need to come from aromatics. Commenters argued further that the MOVES model and EPAct model used in the proposal overestimate negative emissions effects due to not capturing the real world effect of changes in refining operation or dilution of aromatics through splash blending ethanol. In the proposed rule, EPA recognized that during the expansion of E10 blending between 2007 and 2012 aromatics levels were observed to decline by a few volume percent while pump octane levels stayed constant. An even greater

⁵¹ See 84 FR 10594 (March 21, 2019).

⁵² See "Gasoline Reid Vapor Pressure," available at: https://www.epa.gov/gasoline-standards/gasoline-reid-vapor-pressure.

decline in aromatics and the harmful emissions they cause would be expected to occur with a move to mid-level gasoline-ethanol blends, such as E30, without any resulting loss of octane level. Indeed, EPA is directed to reduce mobile source air toxics to the greatest achievable degree. See 42 U.S.C. § 7521(1).

Response:

While aromatics content has historically been a control lever, refiners have used to adjust the octane level of gasoline, it is not the only one. In recent years, due to lower natural gas prices, alkylate has also been an important lever, as well as changes that reduce the level of low-octane blendstocks in their product mix. Therefore, it is an oversimplification to suggest that the only thing that changes with ethanol use is aromatics. For example, the ethanol content of reformulated gasoline has been constant at 10 volume percent since the switch from MTBE in 2006/7, yet the aromatic content of gasoline has decreased by over 3 volume percent since then.

Refineries, however, are only able to adjust the octane level and thus aromatic level in the BOBs they produce for subsequent blending downstream at retail with ethanol. Currently, and for the foreseeable future, E15 is expected to be blended using the same BOBs used to produce E10. (Were this not the case, and unique E15 BOBs could be easily produced and distributed for E15, then E15 would not need the 1-psi RVP waiver to be distributed.) When 15 percent ethanol is added instead of 10 percent to a gasoline BOB, the aromatics level in the finished gasoline will be further diluted. This impact of aromatics dilution was accounted for in the emission impact estimates provided in Section II.F of the final rule.

With respect to impacts of a hypothetical E30 fuel, those are outside the scope of this rulemaking, as we proposed to address only E15.

Comment:

Commenters requested that EPA remove regulatory barriers in the regulations at 40 CFR part 80 to allow for the use of biobutanol in RFG areas. Commenters noted that these barriers include allowing oxygenate blenders the ability to blend 16 volume percent biobutanol in the same RBOB that is made for E10 under 40 CFR 80.69 and removing the lower valid range limit of RVP in the complex model at 40 CFR 80.41.

Response:

Changes to the RFG regulations at 40 CFR part 80 are outside the scope of this action.

Comment:

Commenters note that most cars older than MY2012 and even in cars after that period have owner's manual language warning against the use of E15 and voiding manufacturer's general warranties. Commenters also note that using E15 in nonroad products, such as marine engines, will void manufacturers' general warranties. Any damage resulting from E15 misfueling will therefore be borne entirely by the consumer resulting in significant costs to consumers. Another commenter noted that 90 percent of new vehicles (i.e., MY2020 and newer light-duty motor vehicles) are warrantied for E15.

Response:

Manufacturer warranties vary and not all manufacturers condition their warranties on use of particular fuels. While EPA regulations governing emissions warranties allow a manufacturer to condition emission warranties on use of a broadly available fuel, manufacturers may not deny a warranty claim based on use of a different fuel if that fuel did not cause the problem for which the warranty claim is made. Addressing issues of general manufacturer warranties is outside the scope of this rulemaking.

Comment:

Commenters suggested that EPA should state that parties that comply with EPA's regulations at 40 CFR part 80, subpart N, should be provided a safe harbor from liability arising from the misfueling of vehicles, engines, and equipment not allowed to use E15 or any damages related from the use of E15.

Response:

The regulations at 40 CFR 80.1507 provided affirmative defenses for civil violations under 40 CFR part 80, subpart N, and we continue to believe these defenses are sufficient to address liability under the CAA resulting from the misfueling of vehicles, engines, and equipment not allowed to use E15.

Comment:

A commenter suggested that EPA consider the Consumer Protection and Fuel Transparency Act of 2019 (HR 1024) which has been introduced in the 116th Congress.

Response:

We cannot enact requirements based on pending legislation.

Comment:

One commenter requested that EPA begin a rulemaking to transition to higher minimum octane fuels (95 RON or greater) and immediately eliminate subgrade fuel less than 87 AKI to support implementation of future, more-efficient engine technologies.

Response:

Establishing a minimum octane standard and eliminating subgrade fuels are outside the scope of this rulemaking.

Comment:

A commenter requested that EPA use its authority under CAA sec. 211(c) to remove the 1-psi waiver for E10.

Response:

Removing the 1-psi waiver for E10 is outside the scope of this rulemaking.

Comment:

A commenter suggested that EPA should make the E15 survey data public, and that future survey should include a check on whether the fuel is properly labeled.

Response:

We will continue to evaluate ways to improve transparency, including publicly making the data from the E15 survey program. Surveyors that conduct surveys under the regulations at 40 CFR 80.1502 must ensure that fuel dispensers offering E15 are labeled in accordance with EPA labeling requirements at 40 CFR 80.1501.

Comment:

One commenter suggested that the move to E15 could result in refiners relaxing controls on sulfur, benzene and aromatic content of blendstock, such that any benefits from additional ethanol use in fuel would be negated.

Response:

Refineries are only able to adjust the properties of the BOBs that they produce (for subsequent blending downstream at retail with ethanol). Currently, and for the foreseeable future, E15 would be expected to be blended using the same BOBs used to produce E10. Consequently, refiners will not be able to adjust other fuel properties of the BOBs they produce unless and until E15 displaces the vast majority of E10 nationwide.

Comment:

Commenters pointed to CAA sec. 202(1) as requiring EPA to take action to reduce air toxics such as aromatics as justification for EPA allowing greater ethanol use in gasoline. They suggest Congress intended additional reductions in aromatics through replacement with ethanol as a "maximum achievable control technology" under CAA sec. 202(1). Commenters pointed to this need to satisfy CAA sec. 202(1) as a reason for extending the 1-psi waiver and the sub sim finding to higher level gasoline-ethanol blends.

Response:

As discussed in Section 1.3.2.2 of this document, any comments about higher level gasolineethanol blends are beyond the scope of this rulemaking.

1.9.1 Effective Date

Commenters that provided comment on this topic include but are not limited to: 0587, 0657, 0754, 0797, 0863, 0865, 0877, 0887, 0895, 0910, 0914.

Comment:

Commenters suggest that EPA must allow E15 to receive the 1-psi waiver effective June 1, 2019, or E15 sales will be significantly disrupted.

Other commenters suggested that EPA should finalize this rulemaking by mid-May.

Response:

The extension of the 1-psi waiver to E15 was implemented by June 1, 2019.

1.9.2 Preemption

Commenters that provided comment on this topic include but are not limited to: 0854, 0864, 0895, 0908, 0913.

Comment:

Commenters suggested that EPA should find that state regulations on RVP of E15 that differ from the regulations EPA is finalizing should be "presumptively preempted" as they are no longer identical to the federal standard.

Another commenter requested that EPA state that any state-mandated requirement for the labeling of E15 in addition to or different from those required by EPA would conflict with and/or undermine the effectiveness of the EPA E15 label.

Response:

In this action we are construing CAA sec. 211(h)(4) as specifying the minimum ethanol content that fuel blends containing ethanol and gasoline must contain to qualify for the 1-psi waiver. As explained in the final rule, under this construct the 1-psi waiver would be applicable to gasoline-ethanol blends the agency finds are sub sim under CAA sec. 211(f)(1) as well as those gasoline-ethanol blends that receive or have received a CAA sec. 211(f)(4) waiver. Currently, these are E10 and E15, based on EPA's prior issuance of partial waivers under CAA sec. 211(f)(4), and the finding in this rulemaking that E15 is sub sim to Tier 3 E10 certification fuel, under CAA sec. 211(f)(1), when used in MY2001 and newer light-duty motor vehicles. This construct, and the corresponding regulations to implement this construct, do not initiate any new preemption of state authority under CAA sec. 211(c)(4)(A) but rather extend the 1-psi waiver to gasoline-ethanol blends containing up to 15 percent ethanol. Further, we believe that questions regarding preemption of specific state fuel controls and determinations should be addressed in the context of a specific SIP rulemaking. Through this process, we can consider specific circumstances involved given that preemption tends to be a fact specific inquiry.

As a general matter, CAA sec. 211(c)(4)(A) prohibits states and political subdivisions from prescribing or attempting "to enforce, for purposes of motor vehicle emission control, any control or prohibition, respecting any characteristic or component of a fuel or fuel additive in a motor vehicle or motor vehicle engine" if EPA has prescribed a control or prohibition applicable to such characteristic or component of the fuel or fuel additive under CAA sec. 211(c)(1). This prohibition does not apply to either controls or prohibitions that are identical to those adopted by EPA. CAA sec. 211(c)(4)(A)(ii). Also, this prohibition applies to all states except California. CAA sec. 211(c)(4)(B).

Given that CAA sec. 211(c)(4)(A) applies only to controls or prohibitions respecting any characteristics or components of fuels or fuel additives for use in motor vehicles or motor vehicle

⁵³ We explained in the "Boutique Fuels List under Section 1541(b) of the Energy Policy Act" that the listed fuel types were based on the "required specific fuel components, specifications, or limits of each fuel type (for example, 7.8 psi RVP)." See 71 FR 78194 (December 28, 2006). We did not list fuel types based on whether or not the state fuel rule provided the 1.0 psi waiver for E10 because the 1.0 psi RVP waiver is not a control or prohibition under CAA sec. 211(c)(4)(A) Id. at 78196.

engines, i.e., on road or highway vehicles, a state control or prohibition respecting gasoline-ethanol blended fuels or fuel additives would be preempted only if it is "for purposes of motor vehicle emission control." Further, under CAA sec. 211(c)(4)(C)(i) states, other than California, may prescribe and enforce nonidentical measures if they seek and obtain EPA approval of SIP revisions containing such control measures.

With regard to pump labeling requirement, in 2011 we promulgated the MMR, which included pump labeling requirements, under CAA sec. 211(c)(1), and at the time, we explained that our action would result in an express preemption under CAA sec. 211(c)(4)(A) of nonidentical actions by states other than California that prescribe or enforce certain controls or prohibitions respecting ethanol content in gasoline if they were for purposes of controlling motor vehicle emissions. This action continues this explicit preemption, under CAA sec. 211(c)(4)(A), of state actions to prescribe or enforce differing controls. States other than California wishing to adopt nonidentical controls requirements for gasoline-ethanol blend into their SIPs continue to be preempted under CAA sec. 211(c)(4)(A) and will therefore need to obtain a waiver under the provisions described in CAA sec. 211(c)(4)(C)(i) and (v).

Finally, under the supremacy clause of the U.S. Constitution, state laws may not conflict with federal laws, including regulations. Thus, aside from the explicit preemption in CAA sec. 211(c)(4)(A), a court could also consider whether a state gasoline-ethanol blend control requirement is implicitly preempted under the supremacy clause of the U.S. Constitution. Courts have determined that a state law is preempted by federal law where the state requirement conflicts with federal law by preventing compliance with both federal and state requirements, or by standing as an obstacle to accomplishment of Congressional objectives. Therefore, notwithstanding a waiver of preemption under CAA sec. 211(c)(4)(C)(i), a court could consider whether a given state gasoline-ethanol blend control requirement is preempted if it either places such significant cost and investment burdens on refiners that refiners cannot meet both state and federal requirements at the same time, or if the state control would otherwise meet the criteria for conflict preemption.

1.9.3 Reopening the E15 Partial Waivers

Commenters that provided comment on this topic include but are not limited to: 0799

Comment:

One commenter argued that EPA reopened the CAA sec. 211(f)(4) waiver because EPA stated that the proposed new interpretation of CAA sec. 211(h) would allow the 1-psi waiver to apply to any gasoline-ethanol blend that has received a waiver under CAA sec. 211(f)(4), which presently includes blends containing up to 15 percent ethanol. The commenter further suggested that EPA's new interpretation of CAA sec. 211(h) would significantly alter the legal regime and practical impact of the existing CAA sec. 211(f)(4) waivers for E15, thereby reopening those waivers for purposes of judicial review.

Another commenter argued that EPA reopened the CAA sec. 211(f)(4) waivers because EPA is proposing to maintain current waiver conditions as they apply to fuel and fuel additive manufacturers while proposing to determine that the waiver conditions no longer apply because of EPA's sub sim determination. The commenter suggested that EPA is claiming that it may reimpose certain conditions previously implemented under the 2010 and 2011 CAA sec. 211(f)(4) partial waivers using its CAA sec. 211(f)(1) authority. Specifically, the commenter further suggested that EPA proposes to strike all the conditions put in place under CAA sec. 211(f)(4) waivers and replace these conditions with other conditions, thereby amending the 2010 and 2011 CAA sec. 211(f)(4) waivers for E15. The commenter posited that EPA cannot keep the 2010 and 2011 CAA sec. 211(f)(4) waivers in effect while severely limiting the scope of the waivers in practice. The commenter also suggested that EPA directly took comment on the partial waivers as part of this rulemaking.

Response:

In this action, we are not reopening the CAA sec. 211(f)(4) partial waivers granted to E15 in 2010 and 2011. We explicitly stated in the NPRM that "EPA is not proposing to revise the E15 partial waivers under CAA sec. 211(f)(4), and is therefore not soliciting comments on the waiver itself or any of its conditions." 84 FR 10588.

As such, our proposed action did not impact those waivers, and we are maintaining the CAA sec. 211(f)(4) waiver as it currently exists as an option for fuel and fuel additive manufacturers to introduce E15 into commerce. In this action, we are also allowing fuel and fuel additive manufacturers to introduce E15 into commerce under sub sim, which would allow fuel and fuel additive manufactures to introduce E15 into commerce without complying with the CAA sec. 211(f)(4) waiver conditions. The CAA sec. 211(f)(1) sub sim finding for E15 we are making as part of this action is distinct from the CAA sec. 211(f)(4) waivers issued to E15 in 2010 and 2011.

The commenter suggested that EPA reopened the CAA Sec. 211(f)(4) partial waivers because we proposed to maintain current waiver conditions as they apply to fuel and fuel additive manufacturers while saying that the conditions no longer apply because of EPA's sub sim determination. The commenter confuses the requirements and applicability of CAA secs. 211(f)(1) and (f)(4) as they relate to this action. EPA is not striking all, or any of, the conditions

put in place under the CAA sec. 211(f)(4) waivers as commenter suggests. EPA is keeping in place the CAA sec. 211(f)(4) waivers while also providing a new path for the introduction of E15 into commerce via the CAA sec. 211(f)(4) sub sim determination for E15. As discussed in Section II.C.9 of the final rule, fuel and fuel additive manufacturers may introduce E15 into commerce under either the CAA sec. 211(f)(4) partial waivers or the CAA sec. 211(f)(1) sub sim determination.

2. RIN Market Reforms

2.1 General

Commenters that provided comment on this topic include but are not limited to: 0545, 0574, 0796, 0809, 0839, 0851, 0869, 0905, 0906, 0914, 0915, 0920, 1106, 1108.

Comment:

Some commenters asserted that EPA appears to be finalizing this rule too quickly, which creates the risk of causing additional problems in the administration of the RFS program. Commenters claim they did not have adequate opportunity to fully evaluate this proposal.

Response:

We understand that some parties may be concerned about the speed of this rulemaking and would have liked more time to evaluate the proposal. However, EPA must weigh multiple factors when developing a rulemaking, including urgency, implementation timing, administrative factors, and resource availability. Though we promulgated the reforms in this rule—Reforms 1 and 5 only—on an expedited schedule, we believe that we evaluated all comments carefully and fully and are finalizing the appropriate regulatory amendments.

Comment:

At least one commenter suggested that EPA should make any reforms it adopts effective beginning in January 2021 to give regulated parties sufficient lead time to adjust.

Response:

The RIN market calculation, reporting, and recordkeeping requirements in this action will be implemented starting January 1, 2020. We believe that notice of seven months is more than enough time for parties to adequately prepare for the new requirements.

EPA sought comments and ideas to address claims of manipulation in the RIN market in the 2018 and 2019 RVO NPRM, and in this proposed rule; thus, parties have had ample opportunities to evaluate and submit comments on this issue.

Comment:

At least one commenter suggested that EPA should finalize all reforms proposed, and not move a single RIN market reform in isolation.

Response:

As further explained in Section III.E of the final rule, we are finalizing two of the five reforms proposed. After reviewing all of the comments and conducting and reviewing RIN market analysis, we believe that public disclosure thresholds and increased reporting requirements are warranted at this time and will result in benefits to the RIN market and to EPA monitoring capabilities. If, after reviewing that data collected and conducting additional market analysis, we determine that it would be prudent to finalize Reform 2, 3, or 4 in the future, we will share the analysis that has led us to believe it could be appropriate and will allow time for parties to

respond, through a separate notice to the public and an additional period provided for public comment, before we proceed with a final rule codifying one or more of these proposed reforms.

EPA is only finalizing Reforms 1 and 5 and believe these reforms will provide additional data and transparency into the RIN market, and allow EPA to further assess claims of market manipulation before taking further action.

Comment:

One commenter asserted that EPA should define "excessive market power."

Response:

We are establishing threshold levels that we believe indicate a potential for excessive market power. However, there are many factors at play in evaluating excessive market power and market manipulation, and some flexibility is necessary. Therefore, we are not defining "excessive market power" in this action.

Comment:

One commenter stated that if EPA believes that RINs are commodities in interstate commerce, it should clearly state that position. The commenter further states that EPA should not equivocate on whether anti-competitive behavior is in violation of the CEA.

Response:

The commenter has requested clarification concerning characterization of enforcement authority under the Commodity Exchange Act (CEA). As referenced in the NPRM at footnote 158 and depending on the facts and circumstances of any particular matter, conduct related to cornering or squeezing the market, as referenced in the NPRM, may violate the anti-fraud and manipulation provisions under the Commodity Exchange Act. See, e.g., Section 9(a)(2) of the CEA, 7 U.S.C. 13(a)(2) (2012) and Section 6(c)(1) of the CEA, 7 U.S.C. 9(1) (2012).

2.1.1 General Support/Opposition

Commenters that provided comment on this topic include but are not limited to: 0574, 0581, 0583, 0585, 0657, 0730, 0737, 0754, 0758, 0759, 0768, 0773, 0796, 0799, 0806, 0809, 0821, 0845, 0851, 0854, 0859, 0860, 0864, 0867, 0869, 0871, 0883, 0884, 0886, 0888, 0889, 0900, 0905, 0906, 0912, 0913, 0914, 0915, 0920, 1106, 1107, 1108.

Comment:

Many commenters opposed EPA's proposed approach of restricting or limiting aspects of the RIN market in this action. Numerous parties commented that EPA should study the market more fully and that EPA should only enhance disclosure and reporting obligations at this time that will provide EPA with additional data that would enable the Agency to assess whether additional regulations are necessary. Commenters asserted that, overall, these proposed changed are unwarranted and may lead to unintended consequences and that the entire market should not have to suffer due to the perceived issues of a few participants.

Some commenters supported EPA's proposed reforms or asserted that they fall short of effectively advancing the goals of enhancing the efficiency and integrity of the RIN market.

Response:

We believe that we should study the market more fully and enhance disclosure obligations that will provide us with additional data. We also believe that we should set aside for future consideration the reforms that are not related to additional data. We believe that the market needs to be studied further for signs of manipulation, and that after that additional monitoring is conducting, we can reconsider whether certain restrictions or limitations on the market are warranted.

Comment:

Some commenters suggested that instead of finalizing the proposed reforms, EPA should continue to work with CFTC to identify and prevent RIN fraud as well as continue making data regarding RIN markets available to the public while protecting confidential business information. One commenter noted that EPA's data postings that started in September 2018 are still relatively new and that EPA does not yet have enough experience to determine how the markets operate in response to this new information. EPA, CFTC, and others should continue to evaluate the market's operation, particularly in light of this new repository of information that was previously not available to market participants.

Response:

While we will continue working with CFTC and making data regarding the RIN market available, we also believe that it is warranted to take some additional steps at this time to increase our market monitoring capabilities. Therefore, EPA believes it is appropriate to finalize some of the proposed reforms at this time.

2.1.2 RIN Market Assessment

Commenters that provided comment on this topic include but are not limited to: 0796, 0799, 0806, 0836, 0851, 0869, 0871, 0912, 0920.

Comment:

Some commenters offered assessments of price volatility in the RIN market. One commenter compared the D6 RIN price volatility with the price volatility in futures markets for ethanol, oil, and natural gas. The commenter found that the D6 RIN market is ten times as volatile as those other markets, which they asserted makes the RIN market susceptible to manipulation. The commenter also asserted that D6 RIN prices can exhibit step increases because of the time and investment in physical capital infrastructure necessary to substantially increase ethanol generation capacity.

Other commenters stated that RIN price volatility strongly suggests that some parties are engaging in anti-competitive market manipulation, such as hoarding or seeking to corner the market. Some stated that volatility is due to market manipulation by outside speculators. Other commenters instead asserted that the RIN market is not inherently vulnerable to manipulation or structurally flawed. Commenters point to factors other than anti-competitive behavior for RIN market volatility, such as political rumors and media speculation about EPA policy decisions, which can overtake market fundamentals and create uncertainty. Other causes for RIN price volatility listed by commenters include the inelastic nature of the RIN market, especially with respect to the E10 blendwall, proposed and final RVO rules that set RIN demand, judicial decisions in challenges relating to the RFS, SRE grants, White House meetings, media comments on the future of the program, action by Congress on renewable fuel tax credits, and other political and regulatory activity.

Response:

EPA understands that the D6 RIN price has experienced fluctuations. We believe that these fluctuations are a function of the significantly different markets for ethanol above and below the E10 blendwall. Ethanol sold as E10 is cost competitive with petroleum derived gasoline (and thus would be expected to result in low D6 RIN prices) while ethanol sold in higher level gasoline-ethanol blends is not currently cost competitive with petroleum derived gasoline (and thus would be expected to require higher D6 RIN prices). Whether the market expects that the required volume of ethanol will be above or below the E10 blendwall depends on many factors including the annual RFS required volumes, have often been associated with public announcements about the RFS program, and EPA policy decisions. Significant changes in D6 RIN prices may result in changes in the market's expectations about the required volume of ethanol relative to the E10 blendwall, rather than any market manipulation.

Since we have found no data-based evidence of anti-competitive behavior from the analyses we have conducted and reviewed, and since no specific instances of manipulative behavior have been presented, we do not agree with comments that the fluctuations are attributed to market manipulation. As to the assertion that the D6 RIN market volatility is high compared to certain futures markets, we do not believe that comparing the RIN market to the ethanol, oil, and natural gas futures markets is appropriate. The demand in those markets is not set by regulation the way

it is in the RIN market, do not have anything akin to an E10 blendwall that dramatically swings the value of the marginal supply, are primary markets, not rather than secondary markets like RINs which are subject to volatility in both oil and ethanol/soy markets, and those markets are not typically as directly impacted by policy announcements, changes, and other shocks. We believe that RIN prices and their volatility is expected given the unique structure of the RFS program. See the memorandum in the docket to this action called "RIN Market Assessment" for a more detailed analysis of RIN price volatility.

We disagree with the assertion that the step increases observed in D6 RIN price are related to a limit or delay on ethanol generation capacity. On the contrary, we find that ethanol generation capacity, both in the U.S. and abroad, is ample and could have met increased D6 RIN demand if the fuel market were able to consume it. U.S. ethanol production capacity and production have exceeded the implied volume requirements of the RFS program each year since 2010.

Comment:

Some commenters offered their assessments of RIN market liquidity and transparency. One commenter compared RIN market turnover to turnover in the ethanol, oil, and natural gas futures markets and found that the RIN transaction volume does not increase proportionate to RIN generation or spike as expiry approaches as it does in the commodity futures markets analyzed. The commenter concluded that the RIN market is less liquid than those futures markets. The commenter also approximated the effective bid-ask spread of D6 RINs and of commodity futures using statistical models and concluded that RIN market participants regularly experience significant shocks which move transaction costs to higher levels than found in the commodity futures markets.

Other commenters stated that RIN volume is thin and illiquid. Some commenters indicated that price signals are opaque and that there is a lack of transparency. Other commenters instead asserted that the RIN market is remarkably transparent and that interested parties can easily engage in price discovery by utilizing various price indexes. At least one commenter noted that the fact that a large number of independent fuel marketers can successfully participate in the RIN market is evidence that the market is liquid; these parties are not able to financially carry the RIN cost and rely on selling the RIN quickly after separating it from fuel. One commenter noted that RIN market is significantly smaller in size than other commodities markets.

Response:

We do not believe that comparing the RIN market to the ethanol, oil, and natural gas futures markets is appropriate, especially with respect to market liquidity. In the RIN market, obligated parties must acquire, hold, accumulate, and ultimately retire RINs to comply with their RFS regulations. Obligated parties have a strong disincentive to trade RINs close to the expiry date because they do not want to risk falling short of their obligations and be in violation of the law. As our publicly available RFS data indicate, obligated parties typically hold roughly 90 percent of D6 RINs. That number indicates that a significant majority of the RIN market is typically held for compliance rather than liquidly traded. This is not the case in the commodity futures markets studied, which makes them poor comparisons for the RIN market. As to the findings related to the bid-ask spread, EPA acknowledges that the RIN market is subject to shocks, as explained in the previous response, and that participants must adjust to these shocks. A market that is much

smaller than the oil, natural gas, and ethanol futures markets will understandably adjust more slowly to those shocks. Finally, we find comments from those who find the RIN market adequately transparent and liquid persuasive.

Comment:

Some commenters offered their assessments of other conditions of the RIN market. One commenter analyzed the price differentials between nearest expiry RIN vintages and the second available vintage (e.g., current year and prior year vintages) between 2011 and 2018 to determine whether they are consistent with rational pricing expectations. The commenter found dozens of weeks for which the nearest-expiry RINs are priced above the next available vintage and concluded that the cause for this could be hoarding, market fragmentation, or something else.

Response:

The commenter did not provide sufficient detail for EPA to examine time periods when this supposedly irrational pricing behavior occurred. Regardless, we examined RIN price data available to EPA to address this concern. We believe that a number of factors could have caused the otherwise seemingly irrational RIN price differentials observed by the commenter. First and foremost, the compliance deadlines in 2014, 2015, and 2016 were delayed and did not occur as expected. This delay nullified the expiry-date of several RIN vintages. For example, a RIN generated in 2013 would have expired on March 31, 2015, if the RFS program had been operating as expected at that time. However, due to the deadline delay, that 2013 RIN continued to be valid through 2016.

Furthermore, even when the deadlines resumed to normalcy in 2017 and 2018, RINs generated in the first quarter of the compliance year could rationally be of lower value than the RINs generated in the prior year because the RINs generated in the compliance could not be applied toward the upcoming compliance deadline. For example, a RIN generated in the first quarter of 2018 could not have applied to a party's 2017 RVO, for which the compliance deadline was March 31, 2018, so 2018 RINs in that first quarter could be less expensive than 2017 RINs due to greater near term demand for 2017 RINs. This pricing behavior could also result if the market expected the RFS requirements to be less stringent in a future year as compared to the previous year.

In addition, it is worth pointing out that obligated parties are only allowed to meet twenty percent of their current year obligation with prior-year RINs (next available vintage). This factor puts a downward pressure on the value of the next available vintages as compared to regular commodity futures.

Finally, we note that the RIN prices that are reported to EPA and that we subsequently aggregate and post on the website, which the commenter used in their analysis, do not differentiate between spot and term contract prices. Therefore, prices used in the analysis may have been set sometime prior to the transfer date and would not represent the spot price on the transfer date. It is possible for parties to set a firm RIN price for delivery in the future that ultimately turns out to be higher than the spot RIN price on the delivery day. Current year RINs are much more likely to be traded on a long term contract, which may have a previously established fixed price or discount, while older RINs are more likely to be traded in the spot market.

Therefore, we believe that the assumptions made by the commenter about vintage expiry dates and time value are not a sufficient basis to support claims of hoarding or other market manipulation.

Comment:

Commenters referenced other RIN market conditions and structures that they believe do or do not make the RIN market susceptible to manipulation. For example, some commenters asserted that the two-year RIN life and the registration and reporting requirements serve as antimanipulation safeguards, while others asserted that the two-year life of individual RINs is not alone sufficient to deter hoarding because a party could hoard RINs in year one RINs to carryover into year two.

Response:

The RIN market and the RFS regulations that affect it are highly complex and interconnected, and any one feature or condition viewed in isolation can result in varying perspectives, as evidenced by the fact that some commenters believe the two year RIN life helps prevent manipulative behavior and others believe it does not. However, we believe that coming to a conclusion for each of the RIN market features or conditions referenced by commenters on its impact on the likelihood of market manipulation occurring is premature. We believe we need additional information to further assess if such behavior is occurring and therefore we are proceeding with Reforms 1 and 5 in this action.

Overall, we have not seen any data-based evidence that market manipulation is occuring in the RIN market. Nothing in the comments received provides data-based evidence or compelling information that alters the assessment concerning market manipulation that we presented in the NPRM. As stated in the NPRM, however, we believe that market manipulation could potentially occur in the future. Therefore, we believe that RIN market behavior needs to be studied more closely to better understand whether and how manipulation could occur in the RIN market and determine the most appropriate steps to address that risk in a subsequent rulemaking action, if appropriate.

Comment:

One commenter pointed to EPA analysis summarized in the NPRM and asserted that it mirrored the type of behavior highlighted in the NERA report as related to market manipulation. Specifically, the commenter asserted that an obligated party holding a RIN volume equivalent to 18 percent of the market as the compliance period was approaching could very well exhibit manipulative practices because parties in normally functioning markets accelerate sales of outstanding RINs as the expiry date approaches.

Response:

The commenter was referring to our RIN holding analysis in the NPRM that found that, on one day in the first quarter of 2017, one party held 18 percent of the 9.9 billion D6 separated RINs available (i.e., generated but not yet retired or expired) on that day, which was above the 10 to 14 percent maximum observed on other days between 2013 and 2018. In that particular case, an obligated party was holding a large volume of RINs because it needed to demonstrate compliance with its volume requirements by the compliance deadline of March 31, 2017. The

holdings were in line with their production and import volumes and therefore their obligations. The reason that the percentage went to 18 percent suddenly was likely because another one or more obligated parties retired their D6 RINs for the compliance deadline, thereby taking RINs out of the market and reducing the supply of "available" RINs. In other words, by decreasing the denominator of the equation, the resulting ratio appeared higher though the numerator (RIN holding) stayed constant.

Therefore, we do not agree that our analysis pointed to manipulative behavior. In fact, one of the reasons we chose to base our primary threshold on the implied conventional biofuel volume requirement rather than on "available" RINs is because of the sudden and large changes to "available" RINs that occur as the deadline approaches, making the factor unreliable.

We also note that obligated parties have a strong disincentive to trade RINs close to the expiry date because they do not want to risk falling short of their obligations and be in violation of the law. This is not the case in other commodity futures markets, which makes those futures market inappropriate for comparison with the RIN market.

2.1.3 Evidence of Market Manipulation

Commenters that provided comment on this topic include but are not limited to: 0583, 0585, 0737, 0773, 0799, 0806, 0836, 0839, 0854, 0864, 0867, 0869, 0871, 0900, 0905, 0906, 0908, 0912, 0914, 0920, 1108.

Comment:

Some commenters presented information that they directly linked to circumstances of market manipulation. For example, at least one commenter stated that RINs are being hoarded and bought and sold for profit. At least one commenter stated that RIN-long parties have been observed jumping into the market when RIN prices start to fall, which leads to artificially high prices. At least one commenter explained that it has received phantom offers that suddenly vanished and reappeared at higher prices when they attempted to buy at the purported asking price. One commenter described entering into a forward purchase contract with a counterparty at a price indexed to the future RIN price. The commenter observed the counterparty purchase RINs on the spot market at what they believe are artificially high prices to "drive up" the future index price. Some commenters explained that concerns about RIN market manipulation have been raised in numerous letters and papers. At least one commenter stated that RIN prices fluctuate in periods of time when there is no significant regulatory action or market event.

Other commenters stated that they have not seen any transactional problems with the current RIN trading structure and that the allegations of hoarding are wholly unsubstantiated. One commenter explained that it is standard for RIN transactions executed via brokers over-the-counter to be shown as indicative not firm price and that there are valid reasons when brokers are unable to close the trade as originally offered. The commenter asserted that, while this may be frustrating for parties, it is not indicative of market manipulation.

Response:

We have not seen any data-based evidence that market manipulation. Nothing in the comments received provides any additional data-based evidence or compelling information that alters the assessment of market manipulation we presented in the NPRM. In many cases, the allegations of market manipulation were sweeping and vague and did not contain any details such as party names, dates, prices, or volumes, so we could not evaluate them further. Furthermore, we believe that the behavior observed by commenters could be appropriate behavior that is not manipulative. For example, the RIN spot price can rise naturally, consistent with market fundamentals, and a party purchasing RINs at an increased price does not indicate market manipulation. As another example, the phantom offers that one commenter complained about does not appear to be false or misleading but rather normal business practices, as explained by a different commenter. Furthermore, we have conducted and reviewed analyses using non-public, individual-level data and have found no data-based evidence such anti-competitive behavior occurring between market participants.

Nevertheless, we believe that RIN market behavior needs to be studied more closely to better understand whether manipulation could occur. As a result, we are finalizing new disclosure and reporting requirements in this action that will improve our market monitoring capabilities, and we intend to employ a third-party to conduct RIN market monitoring at EPA's direction. We will

also continue to coordinate with the CFTC under our Memorandum of Understanding (MOU). If, after reviewing data and conducting market analysis, we determine that it would be prudent to finalize restrictions or limitations on the RIN market, we will proceed through the rulemaking process to promulgate such reforms.

Comment:

Some commenters noted that market speculators are present throughout the market and impact RIN prices even though they have no connection to the RFS program or any interest in its goals. Other commenters stated that traders are full participants in the RIN market and help it operate efficiently and in a timely manner and add liquidity.

Response:

We find that the presence of traders, brokers or other parties in the RIN market is not in and of itself a sign of market manipulation. We do not believe that the behavior of such parties should automatically be assumed to be anti-competitive, without a closer study of the facts.

Comment:

At least one commenter asserted that a small number of companies control the vast majority of unobligated RINs, and that this caused market manipulation.

Response:

The term "unobligated RINs" is not defined in the commenter's comment. We assume these are RINs that non-obligated parties hold plus RINs that exceed what obligated parties need to meet their upcoming compliance obligations under the RFS program. We have seen no evidence that a small number of companies control the vast majority of "unobligated RINs." As detailed further in Section III.B of the final rule, we analyzed holdings of "excess" RINs (i.e., RINs in excess of individual RVOs) on three days that are representative of seasonal variations across the compliance year and found that they were spread across over 100 parties.

Comment:

At least one commenter asserted that a significant volume of RINs – over 82 million 2017 D6 RINs – have been allowed to expire instead of being used for compliance, which indicated market manipulation.

Response:

The number of 2017 D6 RINs that have expired represent 0.05 percent of the 15.1 billion 2017 D6 RINs generated and could be due to such factors as invalid RINs, spills, calculation error, and RINs owned by small refineries that received a late grant to their exemption petition. We do not believe that this indicated market manipulation.

2.1.4 Costs and Benefits of RMR

Commenters that provided comment on this topic include but are not limited to: 0730, 0737, 0773, 0796, 0799, 0851, 0854, 0860, 0871, 0884, 0886, 0888, 0906, 0912, 1108.

Comment:

Several commenters asserted that Reform 1 is a significant new cost to parties and would require market participants to spend resources on compliance systems and personnel. In particular, some commenters referenced the high burden of calculating and tracking RIN holdings daily. At least one commenter stated that they do not reconcile their RIN inventory position daily. On the other hand, at least one commenter asserted that Reform 1 is not expensive or burdensome.

Response:

The requirements finalized in this action do not require tracking or calculating threshold every day. A party can instead use transaction records, which are already required to be kept by the RFS regulations, to reconstruct its daily RIN holdings at the end of a quarter. Parties can also aggregate with their affiliates at the end of the quarter. For a quantitative breakdown of new recordkeeping and reporting burden imposed by this action, see "Final Rule ICR Detailed Burden Tables" and "Final Rule ICR Supporting Statement" materials in the docket for this action.

Comment:

At least one commenter stated that they would have to increase staffing and build their own management system to capture and analyze the data necessary in order to comply with Reform 1. Another commenter estimated they would need one full time employee to manage the system going forward for Reform 1 and building software to capture and analyze the data may require two to three full time employees for six to nine months.

Response:

We have analyzed the industry average costs associated with these new requirements in the "Final Rule ICR Detailed Burden Tables" and "Final Rule ICR Supporting Statement" materials in the docket for this action. We believe that the burden estimated is reasonable and reflects the range of compliance costs that will be faced by different parties.

Comment:

One commenter stated that EPA should weigh the benefits of reducing the harms described in comments and the benefits of eliminating the market distortion and unfair competitive advantage created by the RFS program. They asserted that by omitting such benefits and costs from the Economic Impacts section, EPA is refusing to acknowledge the harms that some parties have reported regarding structural disadvantages in the RIN market.

Response:

We have previously found that RIN costs are generally passed through in the price of the fuel. See publication EPA-420-R-17-008 entitled "Denial of Petitions for Rulemaking to Change the RFS Point of Obligation". We did not put this finding at issue in the proposal or otherwise reexamine it in this proceeding. Comments on this issue are therefore beyond the scope.

2.2 Reform 1: Public Disclosure above Threshold

2.2.1 Overall Impacts

Commenters that provided comment on this topic include but are not limited to: 0574, 0583, 0585, 0854, 0859, 0889, 0905, 0906, 1107.

Comment:

At least one commenter disagrees that RINs costs are passed through with the price of fuel and believes this should be part of the economic impacts. The reduction in harm that these reforms would have should be counted as a benefit of this rule.

Response:

We have previously found that RIN costs are generally passed through in the price of the fuel. See publication EPA-420-R-17-008 entitled "Denial of Petitions for Rulemaking to Change the RFS Point of Obligation". We did not put this finding at issue in the proposal or otherwise reexamine it in this proceeding. Comments on this issue are therefore beyond the scope. In any event, the commenter has provided no new evidence to the contrary.

Comment:

At least one commenter suggested that, for small refineries with exemptions that result in reinstated retired RINs, EPA should omit the reinstated RINs from the daily threshold limit.

Response:

We do not believe that the amendment requested in this comment is necessary. Many small refineries owned by small refiners are likely to be below the 3 percent primary threshold even if a prior year's RINs are reinstated, due to their small size. Small refineries owned by larger refiners, whose total D6 RIN holdings may exceed the 3 percent primary threshold and therefore require that the secondary threshold test be applied, have options to choose from when managing reinstated RINs. The 10 percent flexibility in the 130 percent secondary threshold is designed for just such instances when an unexpected situation arises that temporarily increases an obligated party's RIN holdings beyond what it needs for normal business operations.

Comment:

Some commenters stated that Reform 1 is unlikely to reduce the potential for manipulation. Another commenter stated that EPA should first collect and analyze more data before determining if a threshold is appropriate. Some commenters generally stated that Reform 1 is not necessary. Another commenter asserted that if properly implemented, Reform 1 should not harm market participants.

Response:

We believe that Reform 1 as finalized will discourage D6 RIN market positions that are excessive by requiring parties to disclose when they have exceeded the thresholds. While we believe that we should conduct market data analysis and acknowledge that we may make additional reforms or amend these reforms after conducting more analysis, we believe that setting a 3 percent primary threshold and a 130 percent secondary threshold now is appropriate.

We believe that the net benefit of this action will be to support increased transparency in the RIN market and reduce perceived market risk. We find that Reform 1 should not harm market participants since they are calculating and reporting on transactions that they already do under normal business operations.

Comment:

At least one commenter asserted that a RIN holding threshold translated to a disincentive for non-obligated parties to blend fuel, which is antithetical to the purpose of the RFS program.

Response:

We do not believe that the primary threshold for non-obligated parties will translate into a disincentive to blend fuel, especially at the level set in this action. Based on the data we have reviewed on the RIN and fuels markets, we have not observed a blender hold more than 450 million separated D6 RINs, even large parties that blend very large volumes of biofuel. We believe that the RFS program should continue to function as usual under the RIN holding conditions promulgated in this action.

2.2.2 Limiting to Separated D6 RINs

Commenters that provided comment on this topic include but are not limited to: 0737, 0806, 0836, 0839, 0850, 0864, 0869, 0888, 0905, 0906, 0912, 0915, 0920.

Comment:

Many commenters agreed with EPA's proposal to limit Reform 1 to D6 RINs only. At least one commenter explained that the D6 RIN has been commoditized to a degree that other RIN categories—specifically the D4 RIN—have not. While D6 RINs are homogenous and can be traded liquidly, the desirability of a D4 RINs varies depending on the identity of the RIN generator. The commenter concluded that this makes D4 RIN trading more sensitive and the D4 RIN market less likely to be manipulated. At least one commenter stated that Reform 1 would be even worse if it was extended to other RIN categories.

Other commenters believed that Reform 1 should be applied to every category of RINs. Limiting the restriction to just D6 RINs could cause hoarders to target other D-codes. Those markets are significantly smaller and therefore more vulnerable to potential manipulation and hoarding.

One commenter stated that if production of other RIN classes increases meaningfully, EPA should consider restricting them in the same manner as D6.

Response:

We are finalizing the thresholds under Reform 1 to D6 RIN holdings only. After considering comments, we conclude that we can limit the scope of this reform to D6 RINs without compromising its intended effect, as explained further in Section III.C of the final rule.

We believe that we should continue to monitor the other markets and be prepared to consider thresholds in the future if the circumstances warrant it at that time.

Comment:

At least one commenter stated that the RIN market is broken because only up to three companies control all of the D3 RINs for sale in a given year, usually at "take it or leave it" prices, and therefore the reforms should cover all D codes.

Response:

It is not necessarily unexpected that in new and smaller markets, such as the cellulosic biofuel RIN market, a relatively small number of companies would have significant market share. The cellulosic waiver credits (CWC) system was designed to address this concern. Largely because of the availability of CWCs for obligated parties that do not want to or cannot buy D3 RINs on the market, as discussed in the memorandum "RIN Market Assessment" in the docket to this rule, we do not have concerns of market manipulation for that RIN category at this time. Therefore, we do not believe that a D3 RIN holding threshold is warranted.

2.2.3 Primary Threshold Level

Commenters that provided comment on this topic include but are not limited to: 0737, 0766, 0799, 0806, 0836, 0854, 0859, 0867, 0869, 0884, 0906, 0912, 0920.

Comment:

Several comments asserted that a 3 percent primary threshold is too high. Some commenters substantiated this assertion by referencing the fact that, in EPA's analysis from the NPRM, no non-obligated parties would have exceeded a 3 percent primary threshold in 2017. At least one commenter characterized the 3 percent level as symbolic.

Other commenters believed that a 3 percent primary threshold is too low to isolate instances of potential hoarding or market manipulation and stated that it could sweep up legitimate trading activity. At least one commenter stated that they believe 3 percent is appropriate. One commenter asserted that lowering the threshold below 3 percent might create the impression of a problem where none exists. One commenter pointed out that CARB's Cap-and-Trade program should have a lower threshold than the RFS program because GHG allowances do not expire and the compliance period is longer. One commenter suggested that EPA raise the primary threshold to at least 6 percent.

Of those commenters who disagreed with EPA's proposed primary threshold level, some supported lowering the primary threshold to 1 percent, stating that 150 million RINs is more than any non-obligated party should need. One commenter explained that 1 percent is proportional to the harm many obligated parties experience as a result of the RIN market. At least one commenter recommended a primary threshold of 0.5 percent. Another commenter recommended that EPA assess the 95th percentile of RIN positions and review them along with RIN prices to determine binding position limits.

Some commenters stated that the proposed threshold was arbitrary. One commenter stated that the threshold should be based on observed activity, not on other programs provisions.

Response:

We believe that a 3 percent primary threshold is appropriate. We believe that it can serve as a meaningful indicator of potentially excessive holdings in the D6 RIN market. Given comments that a RIN holding threshold set too low could discourage blending and cause harm to parties, we continue to believe that going any lower than three percent would be unwarranted.

We disagree with assertions that a 3 percent primary threshold is too low merely because it was not exceeded in 2017 by any non-obligated party. As described in Section III.B of the final rule, we have conducted and reviewed analyses using non-public, individual-level data and have found no data-based evidence that anti-competitive behavior is occurring between market participants. Thus, we believe it would be unwarranted to set the primary threshold lower in order to put the non-obligated parties with the largest RIN holders above it. As such, we do not believe it is warranted at this time to assess the 95th percentile of RIN holdings to determine position limits. We believe the thresholds finalized under Reform 1 are appropriate for now, and as we collect more data, we will assess whether further limits are necessary.

Comment:

One commenter suggested that EPA use CFTC regulations as a guide for setting holding limits (17 CFR 150.5), including bona fide hedging exemptions, while another emphasized that the RIN market is different from markets regulated by the CFTC, and EPA should not import CFTC position limits for futures markets into the RIN spot market context.

Response:

In March 2016, EPA entered into an MOU with the CFTC. The MOU states that "the parties intend to coordinate, cooperate and share information." We have maintained open communication with CFTC on RIN market behavior since the MOU came into effect, including in preparation for this rule. EPA believes the thresholds finalized under Reform 1 are appropriate for now, and as we collect more data, we will assess further if other limits are necessary.

Comment:

At least one commenter noted that 450 million RINs would represent control of over 12 percent of the possible RIN market under quarterly compliance, which represents an opportunity for market manipulation. Another commenter recommended that EPA apply no primary threshold and only a secondary threshold for obligated parties.

Response:

We believe that if a non-obligated party holds 450 million RINs, it would represent excessive RIN holdings beyond what is needed for normal business operations. Therefore, we are finalizing a primary threshold of 3 percent. We believe it is important to set both a primary and secondary threshold so that both non-obligated and obligated parties who participate in the RIN market are held accountable through reporting and public disclosure if they hold what we believe is an excessive amount of D6 RINs.

Comment:

One commenter stated that smaller obligated parties with holdings above the 130 percent secondary threshold but below the 3 percent primary threshold could receive an undue market advantage.

Response:

Our objective with this reform is to discourage and bring transparency to RIN holding levels that are large enough to potentially be used to manipulate the market. We believe that D6 RIN holding levels below the 3 percent level (approximately 450 million D6 RINs) are unlikely to be large enough for cornering or squeezing the market. Therefore, we believe that any party that has holdings below this level, including obligated parties, may likely have business reasons for doing so that are not necessarily indicative of manipulative behavior.

Comment:

One commenter interpreted the comments of another commenter, NERA, as concluding that holdings of five percent of total RIN supply (185 million RINs) on a given day can affect the market. The commenter used this information to assert that 3 percent is too high of a primary threshold.

Response:

We believe that the commenter misinterpreted the conclusion that NERA drew in its analysis. In the report submitted with their comments, NERA stated that all non-obligated parties combined generally owned between 5 to 10 percent of all RINs between 2013 and 2017 and that given that fact, "it is possible for non-obligated parties to withhold and release RINs in a manner which moves supply across hypothesized supply curve steps, resulting in jumps in price disproportionate to the change in available RINs." We note that at the end of the fourth quarter in 2017, 5 percent of the total separated D6 RIN holdings was 780 million, not 185 million.

Comment:

One commenter explained that the gap between the conventional ethanol requirement in the 2018 RVO and the E10 blendwall was approximately 700 million gallons, and that this indicated that even a one percent threshold would be too high. Until a one percent threshold, multiple entities could each hold 125 million RINs, for example, and together cross the market over the E10 blendwall and drive RIN prices up artificially.

Response:

The 3 percent primary threshold is 450 million separated D6 RINs. Thus, even in this situation, no party could singlehandedly move the blendwall below the conventional biofuel volume requirement. Therefore, we believe that 450 million is an appropriate threshold for the public disclosure consequence. Given the additional data that we will be collecting and the market monitoring analysis we will be soliciting from a third-party expert, we will be able to conduct threshold calculations at other threshold levels to better understand RIN holding activity in the RIN market.

2.2.4 Secondary Threshold Level

Commenters that provided comment on this topic include but are not limited to: 0737, 0799, 0806, 0836, 0839, 0859, 0869, 0884, 0906, 0912, 0920.

Comment:

At least one commenter asserted that the disclosure obligations of Reform 1 should apply to RIN-short obligated parties. They stated that any disclosure obligations imposed upon RIN-long obligated parties must apply in a fully parallel fashion to RIN-short obligated parties. They further stated that imposing asymmetrical information or forced liquidation requirements without a parallel, forced purchase requirements will create severe distortions in the marketplace and undercut the RFS program without alleviating any alleged manipulation. Similarly, another commenter asserted that EPA ignores the possibility that its proposed reforms may enable "long squeezes," where parties that own RINs are unable to sell them (or sell them at reasonable prices) because buyers have chosen not to engage in the market.

Response:

Reform 1 imposes a threshold on D6 RIN holdings to discourage holding excessive RINs and bring transparency to the RIN market. This is in response to concerns that parties are hoarding RINs to corner the market. We are not aware of "long squeezes" occurring, therefore we did not set a threshold on obligated parties holding too few RINs. After this action is finalized, as we gather additional data, we will consider whether any future action related to "long squeezes" or other concerns raised are warranted.

Comment:

Several parties agreed with our proposal for a secondary threshold that is set at 130 percent of an individual obligated party's implied conventional biofuel RVO. Some stated that there is no basis for a party to hold more than 130 percent of its RVO on any single day. At least one commenter believes that it is too low to isolate instances of potential hoarding or market manipulation and that it could sweep up legitimate trading activity. At least two other commenters asserted that 130 percent is too high, and that the threshold should instead be 120 percent. These commenters asserted that there is no need for an additional 10 percent flexibility and that a level of 120 percent would allow enough breathing room to hold more RINs than strictly necessary for compliance, to allow for refinery outages or supply disruptions.

Response:

We chose 130 percent because it allows for holdings of 100 percent of their next implied conventional biofuel RVO, 20 percent for banking for the following RVO consistent with our current regulations on carryover RINs, and 10 percent for additional flexibility and uncertainty. We believe that 130 percent is appropriate. After considering comments, we believe that this 10 percent flexibility is important because it could, for example, cover potentially invalid D6 RINs that may not be sold or retired according to the existing RFS regulations or small changes to gasoline and diesel production and import volumes from one year to another that affect the RIN holding calculations. It could also allow refiners with small refineries to reabsorb any RINs reinstated after a small refinery exemption is granted after the compliance date. We believe that

it is important to allow a party to have compliance flexibility should it need it in addition to the 20 percent carryover RIN allowance currently in our regulations.

Comment:

At least two commenters referenced the Renewable Fuel Regulations (RFR) of Environment Canada and suggested that it limits credit holdings to 120 percent of obligations. The commenters suggested that EPA use that element of the RFR as an example for the RFS.

Response:

According to Environment Canada documentation and specific discussions that EPA staff had with Environment Canada staff on the matter, the RFR offers two bases for calculating the monthly ownership provision, and the primary supplier can use the basis that generates the larger number. The method that almost always generates the higher number is based on year to date monthly pool volume. According to this method, a primary supplier may hold up to 120 times its year to date credit obligation at the end of each month. For example, a primary supplier that produces 100 liters of gasoline in January (i.e., the gasoline fuel pool) can own 6 times the fuel pool in credits at the end of January, so 600 credits. Since the biofuel blending requirement for gasoline is 5 percent, a primary supplier's obligation on the 100 liters would be 5 credits in this example, but it would be able to own 600. This is not the same as a 120 percent credit holding limit. Therefore, we did not find the RFR an appropriate comparison when developing the threshold levels in this action.

2.2.5 Further Actions

Commenters that provided comment on this topic include but are not limited to: 0737, 0799, 0836, 0839, 0869, 0906.

Comment:

At least one comment suggested that EPA establish CFTC-led enforcement mechanisms, such as initiating investigations into a party's RIN holdings if they exceed the threshold in two consecutive months. Another commenter asserted that involvement of the CFTC in reviewing a party's RIN holdings would add a credible enforcement threat with the potential to alter market behavior. A different commenter asserted that EPA and CFTC should issue guidance relating to RIN market manipulation enforcement issues.

Response:

In March 2016, EPA entered into an MOU with the CFTC. The MOU stated that "the parties intend to coordinate, cooperate and share information." We have maintained open communication with CFTC on RIN market behavior since the MOU came into effect, including in preparation for this rule.

If any party exceeds the RIN holding thresholds in this action, EPA under the guidance of the MOU has the option to share EMTS data with the CFTC. The CFTC will use the information to advise EPA on techniques that could be employed to minimize fraud, market abuses or other violations, and to conduct appropriate oversight in RIN and renewable fuel markets to aid EPA in successfully fulfilling EPA's statutory functions under the CAA.

Comment:

Several commenters offered suggestions for other restrictions and policies beyond what EPA proposed, such as a RIN price cap or collar, a D6 RIN waiver credit, allowing RINs separated from exported renewable fuel to be used for compliance by obligated parties, requiring that parties above the threshold offer excess RINs for sale, establishing an exchange, and limiting how many times a RIN can be transferred.

Response:

Such reforms are beyond the scope of this action. Once we collect more data and have an opportunity to do more analysis, after promulgation of this rule, we will assess whether any of those suggestions would be appropriate.

Comment:

At least one commenter suggested that if a party exceeds the public disclosure threshold in one quarter (or for more than three days in a quarter), a prohibitive holding limit should apply to that party for the next two quarters.

Response:

We considered establishing a prohibitive limit on RIN holdings with an enforcement consequence if exceeded. Based on comments received, we do not believe that a prohibitive limit is warranted at this time. We believe that a consequence of public disclosure has a strong enough

deterrent effect. If we see that parties are exceeding the threshold multiple times or multiple days in a row, we can evaluate the circumstances more closely and take additional action at that time, if warranted.

2.2.6 Establishing a Prohibitive Limit

Commenters that provided comment on this topic include but are not limited to: 0737, 0759, 0799, 0800, 0806, 0836, 0839, 0859, 0867, 0884, 0900, 0906, 0912, 0920, 1108.

Comment:

Many parties commented on whether the EPA-set thresholds should be firm limits. Some commenters strongly opposed firm limits because it would alter market behavior. Several commenters stated that firm limits would have even more adverse and unintended consequences that public disclosure thresholds, which they also opposed. On the other hand, some commenters supported firm limits over public disclosure thresholds. They asserted that public disclosure will not be sufficient to prevent excessive market power or anti-competitive behavior and that enforceable position limits are necessary. At least one commenter believed that public disclosure will allow participants to too easily provide weak or invalid justifications for exceeding the reporting threshold. At least one commenter asserted that a firm limit should not present difficulties for regulated parties because similar mechanisms are widely in use in other commodity markets.

Response:

EPA considered establishing a prohibitive limit on RIN holdings with an enforcement consequence, if exceeded. Based on comments received, we do not believe that a prohibitive limit is warranted at this time. We believe that the consequence of public disclosure has a strong enough deterrent effect. If parties exceed the threshold, we can evaluate the circumstances more closely and we can take additional action at that time if warranted.

Comment:

One commenter offered that establishing a prohibitive limit instead of a public disclosure threshold could alleviate concerns that some parties have raised over CBI.

Response:

Commenters who expressed CBI concerns over public disclosure of the name of any party exceeding the threshold indicated stronger opposition to a prohibitive limit than to a public disclosure threshold. This was one of the factors we took into consideration when deciding to finalize public disclosure thresholds. We believe that public disclosure provides enough of a deterrent effect such that a more prohibitive limit is not warranted at this time.

Comment:

One commenter stated that CARB's GHG Cap-and-Trade program and markets under CFTC oversight have prohibitive limits, and that these limits are highly effective in markets that resemble the RIN market. Another commenter pointed out that CARB's Cap-and-Trade allowances do not expire and the compliance period is longer than the RFS compliance period, so CARB is a poor comparison.

Response:

Regulatory bodies supervising markets, such as the CFTC and CARB, regularly take measures to prevent excessive market power, and it is useful when considering new regulations in the RIN

market to assess the tools used in other comparable areas. In developing the RFS RIN holding threshold, we considered what regulators in other programs with markets do to inform our decision, but we also considered the different features and needs of the regulated markets. For example, CFTC-regulated markets are pure futures markets with underlying physical commodities markets. Furthermore, the allowances in CARB's Cap-and-Trade program do not expire, and the compliance period in that program is longer than the RFS compliance period. We believe those differences support an approach to the RIN market that is informed by but not exactly the same as those markets. Therefore, we are finalizing a public disclosure threshold.

2.2.7 Reporting and Recordkeeping Requirements

Commenters that provided comment on this topic include but are not limited to: 0737, 0764, 0796, 0800, 0804, 0806, 0836, 0859, 0860, 0869, 0871, 0884, 0888, 0906, 1108.

Comment:

Some commenters supported quarterly reporting of the threshold calculation results, while other commenters suggested different reporting frequencies. One commenter suggested that reporting should be monthly rather than quarterly. Another commenter suggested that a party exceeding the threshold should report the exceedance right away to EPA in order to alert market participants at the time of the exceedance and effect market surveillance. Some commenters asserted that public disclosure as many as 60 days after the exceedance will have little or no impact on the market.

At least one commenter supported calculations of daily RIN holdings while a different commenter recommended enacting a monthly limit rather than daily because of the burden associated with daily calculations.

Response:

We are finalizing requirements that each RIN-holding party assess its RIN holdings and conduct its threshold calculations for each day of a quarter and report the results at the end of that quarter. As further explained in Section III.C of the final rule, parties may conduct the required comparison of daily RIN holdings to the thresholds as infrequently as quarterly to comply with the requirements. Therefore, we do not agree with comments that parties must take on the burden of conducting daily calculations. We believe that accounting for RIN holdings on a daily basis is important to discourage excessive RIN holdings. A party could theoretically acquire excessive RIN holdings, manipulate the market, and then decrease holdings, all in the same month. Therefore, we do not agree with comments that the RIN holdings should be assessed monthly rather than daily.

After considering comments, we believe that quarterly reporting is an adequate frequency for both EPA and public notification of potentially-concerning market power while also appropriately minimizing the calculation burden on parties that feel they are at very low risk of exceeding the relevant threshold. Such parties can conduct the calculation as infrequently as quarterly. We believe that quarterly publication will serve as a valuable notification to other stakeholders about the state of the RIN market and could justify additional monitoring and other potential follow-up actions by EPA. We do not agree with comments that a daily notification is necessary to achieve these outcomes or that a quarterly disclosure will not achieve these outcomes.

Comment:

At least one commenter suggested that EPA should enforce the limit quarterly, meaning the threshold should be based on one quarter's proportion of an obligated party's annual RVO.

Response:

We do not believe that the annual RVO should be pro-rated quarterly when evaluating RIN holdings against the secondary threshold. Obligated parties may choose to comply with their annual RVO by accumulating RINs relatively early in the year based on their compliance strategy. We believe that such a strategy is legitimate for the purpose of compliance and does not indicate market manipulation.

Comment:

At least one commenter suggested that EPA should also require that parties exceeding the threshold report the amount(s) and date(s) of the exceedance(s).

Response:

We are only requiring that parties report more than just a "yes" or "no" as to whether they exceeded the appropriate threshold. If a party reports exceeding a threshold, we could conduct further analysis on their RIN market activity, as appropriate.

Comment:

Several commenters supported using prior year gasoline and diesel and import volumes in the secondary threshold calculation but believed that parties should be allowed to adjust this figure based on the purchase or sale of a refinery or to account for shutdown event or outage. At least one party recommended allowing the use of anticipated RVO instead. Another commenter requested some sort of allowance to take such unforeseen circumstances into account. One commenter stated that the proposed RVO methodology does not account for forward planning efforts by companies based on market views.

Response:

In response to these comments, we have amended the regulations accordingly. We added a paragraph at 40 CFR 80.1435(d) with alternative provisions for obligated parties that need to account for certain volume differences between the prior year and the current year. We note that small differences between this year and last year's volume can be accounted for by the 10 percent flexibility in the secondary threshold.

Comment:

At least one commenter felt that using the prior year's volume could create problems during the first quarter because the prior year's RVO isn't typically reconciled and finalized until June 1.

Response:

We acknowledge that the prior year volumes are often not reconciled until June 1 of the following year, which is the deadline for auditors to file their attest engagements with EPA. However, we do not believe that this will cause a conflict with the secondary threshold calculations. The first quarter RIN Activity Report, which will contain questions about the threshold, is also due on June 1. An obligated party that chooses to calculate its daily RIN holdings more frequently than quarterly can use the best volume numbers available at that time and can then update the threshold calculations close to June 1 when the volume numbers have been finalized.

Comment:

At least one commenter explained that, for most attest procedures, EPA allows the review of a sample of a dataset, rather than the entire dataset. It is not apparent to the commenter why EPA would require the auditor to review "all daily threshold calculations during the attest engagement process" including corporate affiliate values.

Response:

In response to this comment, we have made the commensurate change in the regulations. See 40 CFR 80.1464(a)(4)(ii), (b)(5)(ii), and (c)(3)(ii), which specify that the attest engagement procedures are to select sample RIN holding calculations.

Comment:

One commenter requested that EPA clarify whether the secondary threshold must be performed only for the specific day that the primary threshold is exceeded. The commenter recommended that the secondary threshold calculation be limited to only those specific days on which the primary threshold was exceeded.

Response:

If a party exceeds the primary threshold on one day of the quarter, it must conduct the secondary threshold calculations for all days in that quarter. We do not believe this imposes any additional burden than the approach requested by the commenter because it requires the same equation inputs in both cases. Furthermore, we believe that it is appropriate to apply the secondary threshold to a party with enough RIN holdings to exceed the primary threshold even only on one day. A party operating with such relatively high RIN holdings, even for a short time, could raise concerns and therefore should be held to a threshold that is set around its compliance obligations.

Comment:

Some commenter requested clarification on which RINs should be accounted for in a party's RIN holding calculation. At least one commenter suggested that RINs in a "pending" status in EMTS, for which one party has entered transaction data into EMTS but not the other, not be counted in a party's RIN holdings. One commenter specifically recommend that EPA only require companies to include RINs that are actually categorized as "Available" in their EMTS account rather than RINs that may be "Pending," "Reserved," or otherwise are not yet recorded as "Available." Any other method would result in painstaking calculations that would be overly burdensome. For some companies, it would be simply unworkable to include RINs that are not currently "Available" in EMTS.

Response:

We understand that there can be complexity with accounting for RINs in a pending status. However, we want to ensure that all unretired, separated D6 RINs are accounted for somewhere, in at least one party's RIN holding calculations. EPA intends to address specific implementation questions following the promulgation of this final rule to help clarify any outstanding stakeholder concerns, including how to account for pending RINs in the RIN holding calculations. As we have done with other rulemakings, we will also work directly with stakeholders in the months leading up to and through January 1, 2020, to clearly communicate our expectations for compliance with the newly finalized requirements.

Comment:

One commenter pointed out two perceived errors in 40 CFR 80.1435. The first one is in 40 CFR 80.1435(b)(2), which should reference (a)(3) rather than (a)(4) and the second is in the equations in (b)(2)(iii) which should reference year i-1 rather than year i. The commenter also inquired about the purpose of having the threshold percentages to 2 decimal points.

Response:

As a result of this comment, we corrected 80.1435(b)(2) so that is references (a)(3) rather than (a)(4), We do not agree that the equations in (b)(2)(iii) should reference year i-1 rather than year i. Paragraph (b)(2)(iii) tells the party how to calculate CNV and CNV_DEF for any compliance year, while the equations in (i) and (ii) tell the party what year(s) to use. Therefore, we have not made a change to the regulations in response to this comment. The purpose of writing the threshold percentage to two decimal places is to have more precision and to prevent inconsistencies from undue rounding.

Comment:

At least one commenter asserted that it would be burdensome to account for RINs that may be owned but that have not yet been transferred. The commenter explained that parties often engage in complex transaction types. Threshold calculations could vary depending on the timing of when batches are blended or when imported cargoes are discharged and then confirmed as shore tank deliveries. Another commenter expressed support for excluding forward purchases in thresholds. At least one commenter asserted that excluding these complex and forward transactions, while easier for parties to implement, would make the calculations stale and not actually reflective of a company's market power.

Response:

We are requiring that RIN holding levels be adjusted once the RINs are transferred, as defined in 40 CFR 80.1453(a)(4), and no earlier. Transacted RINs do not need to be reconciled in the RIN holding calculations before the transfer date reported in EMTS. If the transaction is agreed upon but the transfer occurs days or weeks later, the change in either party's RIN holdings would not be made before the transfer date. Therefore, we believe that forward purchases should not be included in threshold calculations until actual transfer occurs.

We do not believe that the implementation provisions would make the RIN holding calculations and threshold determinations stale. We believe that, at this time, parties should only reflect in their RIN holdings RINs that have been transferred to them and that are clearly owned by them in EMTS (i.e., no longer pending).

Comment:

Several commenters suggested that EPA should program EMTS to automatically flag holdings that exceed thresholds. One commenter asserted that there is likely a software or some other mechanism that EPA could employ that would notify Agency staff if any of the relevant thresholds are reached on a daily basis.

Response:

We have decided to require RIN-holding parties to calculate their own RIN holdings, enter them into the threshold equations, enter whether they exceeded the applicable threshold or not into the quarterly RIN Activity Report, and sign, certify, and submit the report to EPA. First, given the potential of public disclosure for parties that exceed a threshold, we believe it is important for RIN-holding parties to be responsible themselves for their own RIN holdings and threshold calculations. Second, we are finalizing alternative provisions that parties can use to determine the RVO value for the threshold calculation equations, and we cannot know whether a party wishes to use those provisions. In making this decision, we also took into consideration the relatively small burden we have estimated for each party to conduct this tracking and calculation for themselves. EPA has to balance priorities and resources when making changes to EMTS and other systems that are costly. At this time, we are not moving forward with any major changes to EMTS and are only modifying the RIN Activity Report to collect the information under Reforms 1 and 5.

2.2.8 Aggregating RIN Holdings

Commenters that provided comment on this topic include but are not limited to: 0764, 0766, 0800, 0859, 0860, 0906, 0920, 1108.

Comment:

At least one commenter emphasized that non-obligated parties that are affiliates to obligated parties should fall within the two-tier reporting threshold. The commenter asserted that non-obligated corporate affiliates should be able to purchase RINs on behalf of an obligated party. The commenter stated that EPA should clarify that a non-obligated party that is an affiliate to an obligated party need not report exceeding a threshold to EPA if its individual RIN holdings are above the 3 percent primary threshold.

Response:

We believe that a non-obligated party in a corporate affiliate group with an obligated party would conduct the same calculations and be subject to the same thresholds as the obligated party in that group. As such, a non-obligated party can acquire and hold RINs for its obligated party affiliate without exceeding the primary threshold. For example, a non-obligated party that holds more than 450 million separated D6 RINs for a corporate affiliated obligated party would not report "yes" to exceeding the threshold in the RIN Activity Report unless its holdings combined with the obligated party's holdings exceeded 130 percent of the obligated party's RVO. We have made edits to 40 CFR 80.1435 to make this clear in response to this comment.

Comment:

Several commenters supported aggregating RIN holdings of corporate affiliates. One commenter stated that this is an important element in preventing parties from spreading RIN holdings among corporate subsidiaries. At least one commenter opposed aggregation of RIN holdings by corporate affiliate group because each affiliate may have compliant reasons for holding RINs. The commenter recommended that, if EPA were to finalize the corporate affiliate group aggregation as proposed, it should increase the primary threshold for corporate affiliate groups.

Response:

The threshold calculation in this final rule requires that separated D6 RIN holdings be aggregated by corporate affiliate group. Based on comments received, we believe that it is important to consider all the D6 RINs that a party has control over when evaluating whether the party has access to excessive levels of RINs. If one party has corporate control over multiple companies, it can control the aggregated RINs of those companies and theoretically direct all to be withheld from the RIN market at the same time, potentially for anti-competitive reasons. We do not believe that parties aggregating RINs should be subject to a higher primary threshold than those with no RIN holding corporate affiliates. We believe that a group of parties affiliated by ownership has the same potential as an individual party to accumulate excessive RIN holdings that could be used to manipulate the market.

Comment:

At least one commenter supported excluding contractual affiliates from this calculation, while another commenter asserted that contractual affiliates should be aggregated for the threshold

analysis. The commenter asserted that this will minimize gaming and that an obligated party that wishes to avoid disclosure could use a contractual relationship to park RINs with another party while still maintaining control over the RINs.

Response:

In light of all of the comments received, we have decided not to require contractual affiliate RIN holdings to be included in the threshold calculations. We believe that a methodology for including such contractual relationships in the aggregation would be too complex and could result in double-counting RINs. One RIN supplier may have contracts in place with multiple parties to deliver RINs, and it is not immediately clear how RINs held by that supplier would be divided among the various contracted parties on any given day for their RIN holding aggregations. For one thing, the terms of some contracts, such as quantity or delivery date, may not be fixed, so the quantity a buyer needs is not immediately known. Even for contracts with fixed quantity and fixed delivery date, the broker is unlikely to be holding many RINs for a contract if the delivery date is far into the future. As such, it is not clear how many of the RINs in the supplier's possession are destined for one client versus another. In addition, some contracts never result in any delivery.

We are finalizing requirements that RIN-holding parties report their contractual affiliates to EPA quarterly in their RIN Activity Reports and whether or not the contract resulted in transfer of RINs. We believe these requirements are adequate at this time to minimize the gaming potential without adding a complex and potentially more burdensome layer of accounting requirements.

Comment:

Several commenters pointed out that, in some cases, affiliates are prohibited from sharing RIN information with each other and would have no means of making the daily calculation across potential corporate affiliates. The commenters asserted that the affiliate aggregation provisions would require them to unnecessarily disrupt their well-functioning affiliate transaction safeguards and eliminate barriers between the distinct trading profiles. At least one commenter pointed to CFTC regulations at 17 CFR 150.4(b)(7) as an example of how CFTC exempts aggregation among affiliates that by regulation cannot share information. The commenters suggested that EPA should adopt a similar approach so that its reform only targets entities that actually coordinate and thus, in theory, could aggregate their RIN holdings in a manner that impacts the market.

Response:

In response to these comments, we have finalized exclusions to the corporate affiliate aggregation requirements when there is an absence of common trading-level control and information sharing, or when the sharing of information regarding aggregation with the affiliate could lead either party to violate state or Federal law, or the law of a foreign jurisdiction. See 40 CFR 80.1435(e).

2.2.9 CBI Determination

Commenters that provided comment on this topic include but are not limited to: 0799, 0806, 0851, 0859, 0867, 0884, 0913.

Comment:

Some commenters opposed EPA publishing a company's name if it exceeds the EPA-set threshold. The commenters asserted that this could result in potential damage to a company's reputation and could limit the company's transaction opportunities. At least one commenter stated that releasing the name of a party exceeding a threshold would expose confidential, competitively sensitive business information because such disclosure could allow competitors to squeeze those who have significant holdings.

Some other commenters express support for EPA's proposal to publish the names of the parties that exceed the RIN holding threshold.

Response:

As explained more fully in Section III.C of the final rule, we are finalizing that no confidentiality claims may be asserted by any person with respect to the name of a party that reported exceeding an EPA-set RIN holding threshold.

Comment:

One commenter asserted that public disclosure is anticompetitive because it exposes parties to artificial market pressures that otherwise would not exist.

Response:

We believe that the RIN holding levels consistent with the thresholds in this action are in excess of normal business operations. We do not believe that public disclosure at these thresholds will interfere with a party that is operating in the RIN market in a normally competitive manner.

Comment:

One commenter explained that CARB discloses LCFS positions and suggested that EPA contact CARB to find out whether they believe public disclosure would deter excess RIN holdings.

Response:

EPA staff contacted CARB staff to inquire about LCFS practices. CARB confirmed that it does not publicly disclose the names of parties with large credit positions and therefore could not provide input into whether public disclosure would sufficiently discourage excessively-large RIN holdings.

Comment:

One commenter asserted that public disclosure is not necessary to allow EPA to investigate potential anti-competitive behavior.

Response:

As explained further in Section III.C of the final rule, the objectives of the public disclosure thresholds include helping deter market actors from amassing an excess of separated RINs and providing information to market participants about the underlying status of the market. Public disclosure of any excessive RIN holdings can also help justify stronger action by EPA. Therefore, we believe that public disclosure is the appropriate policy to implement at this time.

2.3 Reform 5: Enhancing EPA's Market Monitoring

2.3.1 General Support/Opposition

Commenters that provided comment on this topic include but are not limited to: 0546, 0582, 0737, 0759, 0799, 0800, 0804, 0806, 0836, 0851, 0854, 0864, 0871, 0898, 0900, 0906.

Comment:

Several commenters expressed broad support for additional data collection to enhance EPA's market monitoring capabilities, preserve the integrity of the RIN markets, and better understand how the RIN markets function. For example, one commenter noted they believe EPA currently has no reliable way to determine whether any market participants are engaging in RIN hoarding or manipulative behaviors. The commenter encouraged EPA to finalize reforms that enable EPA to better identify such occurrences. Several commenters also expressed support for initiatives to increase transparency in the RIN market including suggestions to make public any new information collections finalized in this rulemaking.

Response:

We believe that to uphold the Congressional intent of the RFS, it is critical for EPA to preserve program integrity and conduct necessary levels of oversight. One of the key elements of this objective is to have accurate and comprehensive data on the RIN market. By collecting lists of corporate and contractual affiliates on a quarterly basis, we will not only be better positioned to identify instances of RIN hoarding, but we will also be able to "map" the RIN market to better understand the interconnectedness of market participants. Additionally, improving the quality of our RIN price reporting data in EMTS will benefit all market participants by providing more accurate pricing information. Requiring parties to report in EMTS the mechanism for the trade will also help us understand how RIN trading parties interact and will offer another data point for EPA to use to improve transparency.

As a result of this action, all RIN market participants will now be able to see whether parties are holding large volumes of RINs, and if so which, as EPA will be publishing a list of parties that exceed the new RIN holding thresholds. The information collections (i.e., trade mechanism, better RIN price data, affiliate information) finalized in this action will enable EPA to collect data to better inform our understanding of how the RIN market operates. We will continue to explore ways to make additional data available to the public, while taking into consideration stakeholder claims of confidentiality and internal resource constraints.

Comment:

Several commenters were opposed to the proposed enhancements to EPA's market monitoring capabilities arguing that EPA already collects the necessary information to assess whether manipulation is occurring in the RIN market and that any additional information collected would place undue burden on the regulated community with no tangible benefit. One commenter noted that because EPA has not seen data-based evidence of market manipulation, it is not clear that greater monitoring is needed.

Response:

We recognize that EPA already collects a substantial amount of data from RIN market participants. However, we have heard from numerous stakeholders that suggest there are regulatory blind spots that bad actors could take advantage of to manipulate the market. We believe that collecting information on affiliated parties will improve our understanding of the RIN market and could help guide our efforts to identify manipulation. Since we do not currently collect any data related to affiliates, this is an existing blind spot in our oversight. It is conceivable that parties could indirectly manipulate the market through affiliated parties, which would remain undetected through our existing oversight mechanisms.

Additionally, we believe that collecting more accurate RIN price data and trade types benefits both EPA and the entire market. This data will help us better understand how the market functions and improve our ability to conduct market oversight. Improving the accuracy of our RIN price data benefits all market participants as will aggregated trade-type data.

While it is true that we have not seen data-based evidence of market manipulation, we believe that greater monitoring will help enhance our data quality, enhance our ability to identify instances of manipulation should they occur in the future, and serve as a deterrent to parties seeking to manipulate the market. We recognize the associated administrative burden and have taken steps to limit is as much as practicable including the use of electronic submission of RFS reporting forms in CDX and RIN trade data in EMTS.

Comment:

One commenter stated that although the proposal to enhance EPA's market monitoring ability was worthy of further study and consideration, that the proposed rule presents the changes too broadly to assess their potential impact. The commenter argues that the preamble and regulatory text of the proposed rule do not indicate how the new price-reporting and transaction-type requirements would be enforced, what penalties would be imposed for noncompliance, or when these new provisions would go into effect. The commenter also notes that these are critically important issues for obligated parties and that they need sufficient lead time to meet the new requirements and make corresponding arrangements with contractual counterparties. The commenter also raised concerns that although EPA could presumably fill in some details through subsequent interpretive rulemakings or *post hoc* guidance, that approach would deprive obligated parties of adequate notice regarding their compliance obligations and expose obligated parties to shifting, inconsistent interpretations over time.

Response:

We disagree that the proposed rule presented the RIN market modifications too broadly to assess their impact. While some implementation details were intentionally presented as options with different permutations to solicit public feedback, we believe most of the framework for each reform was presented sufficiently for the public to provide meaningful comment.

With respect to RIN price-reporting, business rules will be modified in EMTS to prohibit a transaction from processing if the purchase and sale price do not match. We believe this is the most effective and efficient way to ensure that buyers and sellers of RINs are entering the same prices.

With respect to how RIN transaction type reporting will be enforced, parties will be required to maintain records of any transaction they report to EPA. Failure to keep the records would put parties in violation of 40 CFR 80.1454.

We recognize and appreciate the need for affected parties to have adequate lead time to adjust to the changing requirements. Therefore, we are requiring compliance with the revised RFS regulations beginning January 1, 2020. We believe this provides enough time for affected parties to make the necessary adjustments to their compliance strategies.

We intend to work with affected stakeholders as we develop any implementation guidance such that parties will have the certainty necessary to comply with these new requirements.

Comment:

One commenter requested EPA hold industry workshops to evaluate the regulatory proposals and provide an opportunity for affected parties and EPA staff to collaborate on implementation, timelines, and other key details.

Response:

While we do not intend to hold an industry workshop at this time, we will continue to work with affected stakeholders to ensure effective implementation of the new requirements. As we do so and have a better understanding of the questions and issues stakeholders have in complying with these regulations we can at that time assess whether a workshop would be warranted.

Comment:

Two commenters indicated support for EPA's proposed enhancements to data collection and requested that we provide safe harbors for data collection errors and omissions that are made in good faith despite using best practices. To that end, the commenters directed EPA's attention to the safe harbor provisions in the policy statements and orders of the Federal Energy Regulatory Commission (FERC) on price reporting for natural gas and electricity.

Response:

We appreciate the commenters highlighting the safe harbor provisions in the FERC policy statements and orders on price reporting for natural gas and electricity. We believe our approach to modifying the EMTS business rules will address this issue and we do not intend to implement any further provisions at this time.

Comment:

One commenter expressed support for actions by the agency to enhance RIN market transparency and public visibility when they can be performed in a way that does not make it more difficult and complex to transact RINs.

Response:

We believe the finalized enhancements to EPA's market monitoring capabilities strike a balance between gathering valuable market insights while limiting the burden to the regulated community. We do not anticipate any of the additional recordkeeping and reporting requirements will increase the complexity or difficulty of transacting RINs because we are simply asking

parties to report on information they already collect in the same RIN transactions they currently conduct as part of their business model or compliance strategy under the RFS program.

Comment:

Several commenters urged EPA to ensure the protection of CBI in any additional data collections, transparency efforts, or work with external parties to monitor the RIN market.

Response:

We treat all CBI in accordance with the regulations at 40 CFR part 2 and established Agency procedures. As we do with all RFS and RIN market data, we will continue to ensure that CBI is protected in all information shared with external parties.

Comment:

One commenter recommended that EPA collect the following data items to effectively monitor the RIN market: trade date, contract quantity, delivery period, product type (assigned or separated RIN), RIN D code, RIN vintage, and price. The commenter recommended that EPA collect and analyze this data for at least one full compliance year to evaluate whether the other proposed reforms are consistent with the data. The commenter also recommended that this aggregated data be made publicly available daily because it would benefit all market participants.

Response:

Some of the data items recommended are already collected in EMTS. Each EMTS transaction requires parties to include, among other data fields, the product type (assigned or separated RIN), RIN D code, RIN vintage, and price. We considered modifying EMTS to collect additional information on RINs transacted via term contract including the date a contract was agreed upon. We believe this could give us a better picture of RINs withheld from the market over time and better understand how RINs are traded via term contracts. However, we are not in a position to make these modifications to EMTS at this time and are therefore not finalizing them.

We review on an ongoing basis the data currently collected via EMTS and thus do not believe an additional year of collection and analysis is necessary. We are only finalizing one of the other four proposed reforms and believe we have sufficiently reviewed the available data to inform that decision. We will, however, continue to explore ways to make additional data available to the public, while taking into consideration stakeholder claims of confidentiality and internal resource constraints.

Comment:

One commenter suggested that EPA provide its public RIN Holdings Summary report in more frequent intervals. The commenter recommended enhancing the report by further subdividing the "RIN Owner" parties into parties directly involved in the fuel supply chain (e.g., blenders, marketers, retailers, etc.) and parties with no direct involvement in the supply chain (e.g., so-called "speculators" and those parties trading RINs as financial instruments). Another commenter suggested that EPA's recent updates to its RFS website with the posting of weekly pricing data, weekly volume of RINs traded, and the granting of small refinery exemptions occur at even more frequent intervals, as it would assist participants in the market with better price discovery and would further promote a market that works well for all.

Response:

We appreciate the many ideas for additional data collection and believe in the value of providing greater market transparency. However, we need to balance resources, technical feasibility, and CBI considerations as we seek to make RIN market data more frequently accessible to the public. Therefore, we do not intend to implement any additional changes to the RIN Holdings Summary report at this time.

2.3.2 Affiliate Lists for Auditor

Commenters that provided comment on this topic include but are not limited to: 0737, 0759, 0764, 0766, 0800, 0804, 0824, 0851, 0859, 0867, 0884, 0906, 0912, 0913, 1108.

Comment:

Several commenters expressed support for the proposed requirement that attest auditors submit a list documenting all the corporate and contractual affiliates of an obligated party in a given year. One commenter recommended we should require reporting of affiliates holding RINs of all D codes, rather than just D6 RINs. Another commenter recommended EPA only collect contractual affiliate information if we treat it as the highly CBI that it is.

Response:

We continue to believe it is necessary to collect information on corporate and contractual affiliates to enhance our market oversight capabilities and better understand how the RIN market functions. We are finalizing requirements that parties report all RIN-holding corporate affiliates and all contractual affiliates, across all D codes.

We intend to collect contractual affiliate information and treat it in accordance with the CBI regulations at 40 CFR part 2 and established Agency procedures. We are finalizing language specific to CBI treatment of information submitted to us under this final rule.

Comment:

Several commenters were opposed to making corporate and contractual affiliate lists available to the attest auditor, arguing that it would be too burdensome on both industry and EPA. One commenter argued that until there is concrete evidence of manipulation, this amount of data will only divert valuable EPA resources away from actions that move the program forward.

Response:

We continue to believe that reporting of RIN-holding corporate affiliate and contractual affiliates can assist EPA to better understand the RIN market participants, the transactions and holdings. We believe this information will be helpful with compliance oversight and therefore we are finalizing the requirement that parties report corporate and contractual affiliates on a quarterly basis.

Comment:

One commenter suggested that annual reporting of affiliates is insufficient and that we should require reporting of affiliate information more frequently. The commenter noted that without more timely reporting, it will be hard to effect market surveillance and that more current, comprehensive, and standardized position information is critical to conducting effective oversight.

Response:

We agree with this comment and have made changes in the final regulations to require parties to report corporate and contractual affiliates on a quarterly basis via the RFS Activity Report. However, we do not agree that collecting information on a party's position is necessary at this

time because it will be too burdensome and likely not add value until we better understand the market participants and their transactions with one another.

Comment:

Several commenters raised concerns that the proposed language defining affiliation did not provide any guidance with regard to how EPA intends to interpret the term "controls ownership." The commenters further noted that if EPA were to interpret "control" broadly, there would be a significant compliance and information sharing burden in this area. A narrow definition of affiliation may not provide EPA with the data it is looking for. In contrast, an expansive definition of affiliation may render the requirement inoperable. At least one commenter asserts that it would not know how to account for the RIN holdings of its joint ventures.

Response:

We recognize and appreciate the concern that EPA's interpretation of the term "controls ownership" may have significant implementation outcomes with respect to compliance and information sharing burden. These finalized requirements will take effect on January 1, 2020, with the first quarterly report including the new data elements due by June 1, 2020. EPA intends to address specific implementation questions following the promulgation of this final rule to help clarify any outstanding stakeholder concerns, including questions about whether certain situations meet the "controls ownership" language in the corporate affiliate definition and how to account for the RIN holdings of joint ventures. As we have done with other rulemakings, we will also work directly with stakeholders in the months leading up to and through January 1, 2020, to clearly communicate our expectations for compliance with the newly finalized requirements.

Comment:

One commenter said that it may be reasonable to report corporate affiliates, but it may also be very burdensome and costly to identify all contractual affiliates. EPA should determine if information about these latter entities is essential to its monitoring program and whether the burden of providing such information is outweighed by the need for such information. Another commenter did not believe it necessary to include affiliates not registered with EMTS, as such affiliates would not participate in the RFS and would not hold, buy or sell RINs. By requiring disclosure of all such affiliates, the commenter argues EPA would impose a reporting and review burden that does not further the goals of the proposed RFS reform.

Response:

While we anticipate some burden to track and report contractual affiliates, we believe there is value in collecting this information for our implementation of Reform 1. As explained further in Section III.C of the final rule, we are requiring that the reported contractual affiliates include those that do not own RINs and that are not registered with EPA to own RINs because we want to maintain some insight into any additional market share over which parties might have control. We note, however, that the definition of contractual affiliate at 40 CFR 80.1401 relates only to contracts to purchase or hold RINs.

Comment:

One commenter requested that EPA explicitly state in the final rule that the definition of "contractual affiliate" encompasses parties that aggregate RINs on behalf of blenders, many of

whom are small retailers. These aggregators perform an essential function to enable small retailers to participate in the RIN market. This enhances market liquidity and serves the program's purpose by increasing the number of fuel retailers that incorporate biofuels into their fuel supply.

Response:

We believe a RIN aggregator would fall under the definition of a contractual affiliate because we assume they are working under a contract when aggregating RINs for any party. Therefore, we believe there is no need to have a separate definition or exception for RIN aggregators. If a RIN aggregator took title of the RINs which they aggregate, then they would be required under 40 CFR 80.1451 to report to EPA their respective corporate and contractual affiliates on a quarterly basis.

2.3.3 RIN Price Reporting

Commenters that provided comment on this topic include but are not limited to: 0582, 0737, 0759, 0799, 0800, 0804, 0806, 0824, 0850, 0851, 0859, 0864, 0867, 0871, 0883, 0884, 0906, 0912.

Comment:

Several commenters expressed support for the proposed requirement that RIN prices reported by both buyers and sellers match in EMTS because they believe it would improve the quality of data collected and/or reduce potential opportunities for market manipulation.

Response:

We continue to believe this will requirement will improve our RIN price data quality and we are finalizing the requirement in this rule.

Comment:

Several commenters expressed general opposition to changing business rules in EMTS to require RIN prices to match between buyers and sellers. One commenter also noted that it is not clear what would happen in EMTS if there are differences reported.

Response:

We believe this change will improve the RIN price data quality and are finalizing it in this rule. EPA plans to implement the new business rules in a manner that will affect only select reason codes in order to mitigate impact on current business practices. We are also exploring new reason codes.

Comment:

Two commenters noted that common industry practice is to purchase and sell RINs, whether assigned or separated, with renewable fuel at a single combined per-gallon price that includes the value of both the physical fuel and the associated RIN. The commenters argue that in such instances, it would be difficult and subjective to apportion the RIN value to comply with the proposed new business requirements in EMTS. One commenter also encouraged EPA to solicit more information from stakeholders about industry best practices related to RIN prices and transactions to avoid establishing a standard method that is too narrow or too rigid for the various types of practices the industry uses. Another commenter supported the proposed change, provided it only applied to separated RINs.

Response:

As discussed in Section III.D of the final rule, we continue to believe requiring RIN prices reported for trades of both separated and assigned RINs to match can prevent reporting errors and improve the quality and reliability of our RIN price data. We recognize that some parties purchase and sell RINs, separated or assigned, with renewable fuel at a single combined pergallon price which makes it difficult to apportion the RIN value. 40 CFR 80.1452 currently requires parties to report the per gallon RIN price or the per-gallon price of renewable fuel with RINs included in EMTS. This requirement will remain in place for transactions involving assigned RINs meaning parties could still report the per-gallon price of renewable fuel with RINs

included, provided the reported prices match between buyer and seller. For transactions that involve renewable fuel and separated RINs at a single combined price, we anticipate the buying and selling parties will need to come to agreement on a single RIN-only price so that both parties can report the same value in EMTS. We will continue to work with stakeholders as we implement these changes to ensure we achieve the desired outcome with minimal disruption to current industry practices.

Comment:

One commenter noted that most RINs trade as forward contracts, and EMTS data is collected when delivery is made, not when the trade is executed. This means that the EMTS prices are of limited value, because the prices are averaged based on the date of delivery, not when the trades are closed. The commenter raised the issue of delays between the RIN trade date and RIN transfer date. The commenter noted that EPA has previously acknowledged (78 FR 36042, 36064, June 14, 2013), that the date of RIN delivery can be weeks later than the trade date. The commenter recommended that EPA collect data on the RIN trade date to better capture accurate RIN prices at the time two parties agree to enter into a trade.

Response:

We considered the suggestion to require parties to report the trade date for term type transactions but determined that it would take too many resources to modify EMTS to collect this information. While we are not making that change at this time, we will continue to evaluate what additional data collections would provide useful insights without imposing unnecessary burden on industry.

Comment:

One commenter recommended limiting the scope of price matching to spot trades only as it would be difficult to align prices and deal types when accepting deliveries unless all parties relied on a unique identifier for each delivery. Without such an identifier, parties would not be able to positively map a RIN delivery to a contract and verify the contract price. Another commenter argued that the basis for contracted RIN prices can vary by contract (e.g., some contracts are based on the spot price at time of delivery) and that therefore it may be difficult for EPA to obtain meaningful information based on a spot vs. contract distinction.

Response:

We recognize that transacting parties may need to establish unique identifiers to ensure prices are accurately reported for each transaction and we will continue working with stakeholders to address all implementation considerations. We continue to believe that differentiating between spot and term contracts will yield meaningful data and are only requesting that parties include in their RIN activity report whether the price was based on spot or term contracts. A party does not need to further identify the additional factors that went into the price for a term contract.

Comment:

One commenter requested EPA provide a methodology to report a RIN transaction value in EMTS for aggregation when the final sale price is not known. The commenter notes that middlemen consultants typically operate by aggregating RINs from multiple small producers and bring them to market. The sale is then based on published market indexes that include all dates

leading up to the actual sale of the RIN to the obligated party meaning that the actual sale price of the RIN is not known by the client when they transfer the RINs to the middleman for marketing, and therefore, cannot be reported.

Response:

We recognize and appreciate the concerns raised in this comment and in response we will add appropriate terminology and business rules in EMTS to reflect these transactions.

Comment:

One commenter requested EPA provide either a test period or sufficient lead time before implementing this requirement. The commenter also requested EPA issue guidance on how to report the true price correctly. The commenter requests to be able to review and comment on the guidance prior to any new requirements are imposed.

Response:

The RIN market reforms and additional data collections will not be implemented until January 1, 2020 which we believe will provide affected stakeholders with sufficient time to prepare and adjust their compliance strategy. We will work with stakeholders as we implement these changes to ensure we achieve the desired outcome with minimal disruption to current industry practices.

Comment:

One commenter expressed opposition to the proposal to require RIN prices to match between buyers and sellers arguing that to only allow a price of \$0.00 for intracompany and tolling agreement transactions misses "RIN pass-back" transactions. Such transactions occur when a blender purchases a quantity of biofuel without desiring to purchase the RINs enters into a contract to purchase the biofuel and must technically acquire and separate the RINs upon blending before passing the RINs back to the producer. The purchase agreement for the biofuel therefore reflects a "RINless" price as there is no monetary exchange for the RINs. The commenter argues that prohibiting this type of price reporting would discourage larger blenders from purchasing RINs from smaller producers. Often times those producers lack sufficient creditworthiness and the blender essentially functions as a creditor to the producer in such "RIN pass-back" transactions. If these transactions were prevented by requiring prices to match in EMTS, the commenter notes many blenders would simply avoid purchasing biofuel from such producers. The commenter argues this would result in decreased supply and increased prices for renewable fuels, ultimately discouraging fuel marketers from blending.

Response:

We recognize and appreciate the terms raised in this comment and in response we will add appropriate terminology and business rules in EMTS to reflect these transactions.

2.3.4 Transaction Type Reporting

Commenters that provided comment on this topic include but are not limited to: 0737, 0799, 0800, 0806, 0824, 0850, 0851, 0859, 0864, 0867, 0871, 0884, 0906, 0912.

Comment:

Several commenters expressed broad support for requiring that RIN transacting parties report the mechanism for the transaction (i.e., on the spot market or the result of a term contract). One commenter noted that although EMTS is not capable of capturing whether a transaction is a spot deal or a term deal, if EPA were able to indicate if a transaction involved a term deal, it would add transparency to the market, as well as allow better tracking showing forward movements. The commenter encouraged EPA to look to the CFTC's Large Trader Reporting mechanism for comparison purposes. The commenter notes that because CFTC requires daily position reporting, the Commission is able to more closely monitor futures markets for manipulation whereas EPA is unable to do so with the current reporting requirements and systems constraints in EMTS. The commenter urges EPA to consider collecting the RIN trading data needed to fully monitor the market.

Response:

We are finalizing the requirement to report if RIN transaction was based on price of spot or term contract. We reviewed the CFTC's Large Trader Reporting mechanism which we understand is designed specifically for reporting open futures contracts. We appreciate the suggestion and will continue to evaluate all existing systems that may assist in implementing these new requirements. Following the promulgation of this rule, we will also continue to evaluate what, if any, additional data collections may be beneficial to improving transparency and deterring market manipulation.

Comment:

Some commenters expressed opposition against requiring that RIN transacting parties report the mechanism for the transaction (i.e., on the spot market or the result of a term contract). One commenter noted that some parties may have trouble distinguishing between trade types and that an unintended consequence of this requirement may be to create confusion in the marketplace and cause additional burden for parties entering transactions in EMTS. One commenter questioned the utility of reporting transaction types in EMTS noting that contracts are far more complex than the binary nature the proposed rule presumes. Deliveries from term contracts, for example, can be a three-month forward sale at a fixed cost, a yearlong for monthly OPIS average, a yearlong transferring monthly at a price to be settled each month, etc.

Response:

We recognize that transacting parties may need to establish unique identifiers to ensure prices are accurately reported for each transaction and we will continue working with stakeholders to address all implementation considerations. We continue to believe that differentiating between spot and term contracts will yield meaningful data and are only requesting parties include in their RIN activity report if the price was based on spot or term contracts. A party does not need to further identify the additional factors that went into the price for a term contract.

Comment:

One commenter recommended EPA provide guidance on how to distinguish between spot and term contract categories. The commenter suggested a spot RIN trade be defined as any transaction with a single delivery, fixed price, and fixed quantity with no tolerance.

Response:

We will continue to work with stakeholders as we implement these new requirements. We agree with this commenter's suggested definition of a spot RIN trade and have included clarifying language in a footnote in Section III.D of the final rule. We consider a spot type transaction to be a transaction at a fixed price, fixed quantity, and single delivery. We consider a term type transaction as one without a fixed price, fixed quantity, or single delivery.

2.3.5 Third-Party Market Monitor

Commenters that provided comment on this topic include but are not limited to: 0568, 0582, 0737, 0799, 0800, 0824, 0851, 0854, 0859, 0860, 0867, 0871, 0884, 0898, 0906, 1108.

Comment:

Many commenters expressed broad support for EPA to work with a third-party market monitor to analyze the RIN market and identify instances of manipulation. Some commenters also encouraged EPA to implement this reform in conjunction with the new data collections so that the third-party monitor would have the data necessary to thoroughly assess the market. One commenter suggested that EPA look to monitors in the wholesale electricity markets, specifically the Pennsylvania-New Jersey-Maryland (PJM) Interconnection, as a model for independence and analytic capability.

Response:

We are finalizing this as part of Reform 5. As discussed in Section III.D of the final rule, we are affirming our intent to employ a third-party outside of the regulatory process to monitor of the RIN market in conjunction with additional data collections. We are aware of other environmental commodity markets that employ third-party monitoring services to conduct analysis of the market, including the Western Climate Initiative, Inc. which provides market oversight for the Quebec and California cap and trade programs. We have also looked at RGGI to understand how they incorporate third-party market oversight to their CO₂ allowance trading program. We have not looked specifically at monitors for wholesale electricity markets, including PJM, but will evaluate all applicable examples of other markets before engaging with a third-party to conduct oversight of the RIN market.

Comment:

Several commenters were opposed to EPA working with a third-party market monitor. They claimed it was unnecessary and that EPA should perform the work "in-house" or work with other federal agencies such as FTC or CFTC. One commenter concludes that were EPA to determine that a third-party market monitor was necessary to oversee the RIN markets, that CFTC is the most competent authority to perform such actions. Another commenter encouraged EPA to expand the scope of the existing memorandum of understanding between EPA and CFTC to enable the Commission to provide better market oversight.

Response:

We continue to believe additional RIN market oversight and monitoring from an independent third party can serve as a deterrent to manipulative behavior and increase market transparency, enabling the market to more easily function as designed. We will evaluate all available external parties capable of monitoring the RIN market before making any final decisions. We will also continue to coordinate with the CFTC under our existing MOU as written.

Comment:

One commenter argues that the proposed rule does not sufficiently clarify the role of a thirdparty market monitor. The commenter also noted the proposed rule does not include any regulatory text that would govern such a monitor's role and responsibilities. The commenter recommends EPA publish a more detailed proposal for public comment and proceed only after regulated parties have had the change to respond. Another commenter noted that because there is not a significant amount of context in the proposed rule around what "third-party market monitoring" would consist of, it is challenging to provide a thoughtful analysis to the proposal.

Response:

As discussed in Section III.D of the final rule, we intend to access a third-party market monitor after promulgation of this action through a standard contract mechanism. We are not including regulatory amendments to govern the roles and responsibilities of the third-party market monitor. The role of the third-party monitor will be to take available data that EPA currently collects, and from collections finalized in this action, and evaluate it to assess whether market manipulation is occurring, while protecting CBI.

Comment:

Two commenters opposed EPA's proposal to employ a third-party market monitor while recommending that any consideration by EPA of such service providers require very strong protection of data and that they be subject to significant sanctions for the improper disclosure of data. The commenters highlight Section 746 of Dodd-Frank, codified at §4c(a)(4) of the Commodity Exchange Act, which specifically recognized the risks of corrupt dissemination of insider information collected by government agencies. The commenters recommend that EPA take all necessary steps to require strong protection of any such data in the hands of any third-party market monitor and that EPA consider how the Freedom of Information Act would apply to such collected data, and the risks that may thereby be presented to the contributors of such data.

Response:

We continue to believe additional RIN market oversight and monitoring from an independent third party can serve as a deterrent to manipulative behavior and increase market transparency, enabling the market to more easily function as designed. As discussed in Section III.D of the final rule, we intend to access any third-party market monitor through a standard contract mechanism, which requires contractor employees to maintain the same CBI safeguards that EPA employees maintain per 40 CFR part 2.

3. Other Comments

3.1 Executive Orders

Commenters that provided comment on this topic include but are not limited to: 0762, 0799, 0839, 0912, 0916.

Comments related to the ICR burden estimates performed in compliance with the Paperwork Reduction Act are addressed in Section 2.1.4 of this document.

Comment:

Two commenters stated that EPA must conduct a full analysis of the impacts of the RIN market reform provisions on small-business non-obligated parties.

Response:

The commenters were particularly concerned about proposed Reforms 3 and 4, for which we are not taking action on at this time. For Reforms 1 and 5 that we are finalizing, we have considered the impacts on all parties, including non-obligated parties and concluded that there is not a significant impact. For further discussion of this issue, see the memorandum "Screening Analysis for the Final Modifications to RFS RIN Market Regulations," available in the docket for this action.

Comment:

Several commenters stated that EPA did not provide adequate analysis of the E15 costs of the rule to small businesses. One of these commenters stated that by allowing E15 to be sold year-round, EPA would disadvantage small- and mid-sized fuel retailers because large fuel retailers would more easily be able to afford (both financially and physically) the infrastructure necessary to sell E15, thereby giving them a competitive advantage.

Response:

As we stated in the Regulatory Flexibility Analysis section of the preamble, the granting of the E15 1-psi waiver does not substantively alter the regulatory requirements on parties that make and distribute gasoline. While the Regulatory Flexibility Act states that "agencies are required to solicit and consider flexible regulatory proposals," commenters did not provide, nor is it clear to EPA, what regulatory flexibilities EPA could offer to small entities. We are not mandating that small businesses install equipment to sell E15, not do we believe that those that choose not to will be at a competitive disadvantage to those that do.

Furthermore, none of the commenters provided any data or their own analysis to show what impacts, if any, the E15 change will have on small entities. While one commenter provided the estimated cost of installing the infrastructure necessary to dispense E15 and indicated that it was too high for most small retailers to afford, they did not demonstrate how this the cost would be lower for larger retailers and would therefore negatively affect small retailers.

Moreover, this rule is not a mandate for E15. Rather it simply removes one of several hurdles to increased use of E15 that is within EPA's authority to address. It will be up to individuals in the

marketplace to decide whether or not to take advantage of the flexibility offered. As discussed in Section II.E of the final rule, we do not anticipate that E15 use will increase significantly as a result of this action because a number of other hurdles remain.

Comment:

Several commenters suggested that EPA should exempt small entities from the RMR provisions of the rule since there is no evidence that small entities contribute to market manipulation. One of these commenters stated that small refineries that are seeking a hardship exemption should not have to comply with the position limits under Reform 1 since it overly complicated and burdensome.

Response:

We believe that the RIN market reforms we are finalizing in this action represent a minimal burden on all regulated entities, included small entities, and that no exemptions or additional flexibilities are needed. For further discussion of this issue, see the memorandum "Screening Analysis for the Final Modifications to RFS RIN Market Regulations," available in the docket for this action.

3.2 Severability

Commenters that provided comment on this topic include but are not limited to: 0587, 0768, 0804, 0854, 0864, 0877, 0896, 0904, 0908, 0910, 0913, 1107.

Comment:

Commenters suggested that EPA should specify that the E15 and RMR portions of this rulemaking are severable and independent. Some parties suggested that EPA should split the RMR and E15 portions of the rule into two separate rulemakings. Others suggested that not splitting the rulemaking could jeopardize the E15 portion of the rule.

Response:

The final rulemaking contains both E15 and RMR final actions. We have clarified the severability of these components in Section I.C of the final rule.

3.3 Beyond the Scope

Commenters that provided comment on this topic include but are not limited to: 0225, 0544, 0546, 0577, 0581, 0730, 0737, 0748, 0753, 0756, 0773, 0813, 0817, 0835, 0836, 0859, 0864, 0866, 0874, 0877, 0880, 0888, 0893, 0903, 0904, 0908, 0912, 0915, 0917, 0918.

Comment:

Commenters addressed numerous additional topics, including the following:

- Small refinery exemptions, including providing additional transparency and the proposed CBI determination in the REGS rule
- Changes to the point of obligation for the RFS program
- Removing the obligation on exported renewable fuel
- Imposing an RVO on the use of natural gasoline to make E85
- Potential future RFS rulemakings such as the "reset rule" or an action to address the remand of the 2016 RFS standards
- Potential negative environmental impacts of the RFS program

Response:

These comments are all beyond the scope of this rulemaking as EPA did not seek comment on these issues. These topics are not further addressed in this document.